

## Datasheet: MCA6125PE

|                      |                            |
|----------------------|----------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD169:RPE |
| <b>Specificity:</b>  | CD169                      |
| <b>Other names:</b>  | Siglec-1                   |
| <b>Format:</b>       | RPE                        |
| <b>Product Type:</b> | Monoclonal Antibody        |
| <b>Clone:</b>        | 7-239                      |
| <b>Isotype:</b>      | IgG1                       |
| <b>Quantity:</b>     | 100 TESTS/1ml              |

### 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               |

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) - liquid                                    |                            |                          |
| <b>Max Ex/Em</b>                | <b>Fluorophore</b>  | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                 | RPE 488nm laser   | 496                        | 578                      |
|                                 | RPE 561nm laser   | 546                        | 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 Stabilisers</b> | <0.1% Sodium Azide (NaN <sub>3</sub> )<br>0.2% Bovine Serum Albumin                           |                            |                          |
| <b>Immunogen</b>                | Human rhinovirus 14-infected monocyte-derived dendritic cells                                 |                            |                          |

External Database  
Links

UniProt:

[Q9BZZ2](#) [Related reagents](#)

Entrez Gene:

[6614](#) SIGLEC1 [Related reagents](#)

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Synonyms

SN

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Specificity

**Mouse anti Human CD169 clone 7-239**, recognizes CD169 also known as Siglec-1 or Sialoadhesin, is a member of the Siglec family of proteins. It is expressed by subpopulations of macrophages and dendritic cells. Some subpopulations of macrophages express CD169 at a low level, but this expression can be upregulated upon induction by IFN- $\alpha$  ([O'Neill et al. 2013](#)). CD169+ cells are largely found in the lymph nodes, spleen, but are also present in smaller amounts in intestinal tracts, liver and bone marrow ([Hartnell et al. 2001](#)). The most characterized functions of CD169 are its roles in cell-cell interactions and phagocytosis of sialylated pathogens.

CD169 has an approximate molecular weight of 185 kDa and recognizes sialic acid-containing sugar chains. Structurally, it contains an extracellular domain containing 17 immunoglobulin-like domains and one v-set domain via which it binds its' ligands. It also contains 16 C2-set domains which extend the binding site away from the surface of the cell. This extension helps bind granulocytes, B cells, erythrocytes and a subset of CD8 T cells ([Eakin et al. 2016](#)).

Increased expression of CD169 has been found to be associated with various conditions, including atherosclerosis, type I diabetes, chronic rejection and systemic sclerosis ([Bornhöfft et al. 2018](#)).

Mouse anti Human CD169 clone 7-239 has been used in flow cytometry experiments to measure cell surface expression of CD169 upon cell stimulation with IFN- $\alpha$  ([OhAinle et al. 2018](#)).

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Purity

>95% by SDS PAGE

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Flow Cytometry

Use 10ul of the undiluted reagent to label  $1 \times 10^6$  cells in 100ul

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References

1. Hammonds, J.E. *et al.* (2017) Siglec-1 initiates formation of the virus-containing compartment and enhances macrophage-to-T cell transmission of HIV-1. [PLoS Pathog. 13 \(1\): e1006181.](#)
2. Izquierdo-useros, N. *et al.* (2012) Siglec-1 is a novel dendritic cell receptor that mediates HIV-1 trans-infection through recognition of viral membrane gangliosides. [PLoS Biol. 10 \(12\): e1001448.](#)
3. Pino, M. *et al.* (2015) HIV-1 immune activation induces Siglec-1 expression and enhances viral trans-infection in blood and tissue myeloid cells. [Retrovirology. 12: 37.](#)
4. Martinez-picado, J. *et al.* (2016) Identification of Siglec-1 null individuals infected with HIV-1. [Nat Commun. 7: 12412.](#)
5. Perez-Zsolt, D. *et al.* (2019) Anti-Siglec-1 antibodies block Ebola viral uptake and

decrease cytoplasmic viral entry. [Nat Microbiol. 4 \(9\): 1558-1570.](#)

6. Rose, T. *et al.* (2017) Are interferon-related biomarkers advantageous for monitoring disease activity in systemic lupus erythematosus? A longitudinal benchmark study. [Rheumatology \(Oxford\). 56 \(9\): 1618-26.](#)

7. Sharma, V. *et al.* (2021) Cerebrospinal fluid CD4+ T cell infection in humans and macaques during acute HIV-1 and SHIV infection. [PLoS Pathog. 17 \(12\): e1010105.](#)

8. Rath, M. *et al.* (2021) Multi-Antigen Imaging Reveals Inflammatory DC, ADAM17 and Neprilysin as Effectors in Keloid Formation. [Int J Mol Sci. 22 \(17\): 9417.](#)

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**Further Reading**

1. Hartnell, A. *et al.* (2001) Characterization of human sialoadhesin, a sialic acid binding receptor expressed by resident and inflammatory macrophage populations. [Blood. 97 \(1\): 288-96.](#)

2. Eakin, A.J. *et al.* (2016) Siglec-1 and -2 as potential biomarkers in autoimmune disease. [Proteomics Clin Appl. 10 \(6\): 635-44.](#)

3. Bornhöfft, K.F. *et al.* (2018) Siglecs: A journey through the evolution of sialic acid-binding immunoglobulin-type lectins. [Dev Comp Immunol. 86: 219-231.](#)

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**Storage**

Store at +4°C. DO NOT FREEZE.

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

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**Guarantee**

Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA6125PE>  
10041

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

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

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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](https://www.bio-rad-antibodies.com/datasheets)

'M402062:220718'

**Printed on 12 Aug 2024**

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