

Datasheet: MCA6125

**BATCH NUMBER 166694**

<b>Description:</b>	MOUSE ANTI HUMAN CD169
<b>Specificity:</b>	CD169
<b>Other names:</b>	Siglec-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	7-239
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	<b>Yes</b>	<b>No</b>	<b>Not Determined</b>	<b>Suggested Dilution</b>
Flow Cytometry	▪			
Immunohistology - Frozen	▪			
Immunoprecipitation	▪			
Western Blotting	▪			
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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<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> )

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human rhinovirus 14-infected monocyte-derived dendritic cells
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9BZZ2</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">6614</a>    SIGLEC1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	SN
<b>Specificity</b>	<p><b>Mouse anti Human CD169 clone 7-239</b>, 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-<math>\alpha</math> (<a href="#">O'Neill et al. 2013</a>). CD169+ cells are largely found in the lymph nodes, spleen, but are also present in smaller amounts in intestinal tracts, liver and bone marrow (<a href="#">Hartnell et al. 2001</a>). The most characterized functions of CD169 are its roles in cell-cell interactions and phagocytosis of sialylated pathogens.</p> <p>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 (<a href="#">Eakin et al. 2016</a>).</p> <p>Increased expression of CD169 has been found to be associated with various conditions, including atherosclerosis, type I diabetes, chronic rejection and systemic sclerosis (<a href="#">Bornhöfft et al. 2018</a>).</p> <p>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-<math>\alpha</math> (<a href="#">OhAinle et al. 2018</a>).</p>
<b>Purity</b>	>95% by SDS PAGE
<b>References</b>	<ol style="list-style-type: none"> <li>Hammonds, J.E. <i>et al.</i> (2017) Siglec-1 initiates formation of the virus-containing compartment and enhances macrophage-to-T cell transmission of HIV-1. <a href="#">PLoS Pathog. 13 (1): e1006181.</a></li> <li>Izquierdo-useros, N. <i>et al.</i> (2012) Siglec-1 is a novel dendritic cell receptor that mediates HIV-1 trans-infection through recognition of viral membrane gangliosides. <a href="#">PLoS Biol. 10 (12): e1001448.</a></li> <li>Pino, M. <i>et al.</i> (2015) HIV-1 immune activation induces Siglec-1 expression and enhances viral trans-infection in blood and tissue myeloid cells. <a href="#">Retrovirology. 12: 37.</a></li> </ol>

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.](#)

<b>Further Reading</b>	<ol style="list-style-type: none"> <li>1. Hartnell, A. <i>et al.</i> (2001) Characterization of human sialoadhesin, a sialic acid binding receptor expressed by resident and inflammatory macrophage populations. <a href="#">Blood. 97 (1): 288-96.</a></li> <li>2. Eakin, A.J. <i>et al.</i> (2016) Siglec-1 and -2 as potential biomarkers in autoimmune disease. <a href="#">Proteomics Clin Appl. 10 (6): 635-44.</a></li> <li>3. Bornhöfft, K.F. <i>et al.</i> (2018) Siglecs: A journey through the evolution of sialic acid-binding immunoglobulin-type lectins. <a href="#">Dev Comp Immunol. 86: 219-231.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C. DO NOT FREEZE.</p> <p>This product should be stored undiluted.</p>
<b>Guarantee</b>	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA6125">https://www.bio-rad-antibodies.com/SDS/MCA6125</a></p> <p>10040</p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### Recommended Negative Controls

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

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

**Worldwide** Tel: +44 (0)1865 852 700

**Europe** Tel: +49 (0) 89 8090 95 21

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

Fax: +44 (0)1865 852 739

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Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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