

Datasheet: MCA6079

**BATCH NUMBER 161186**

<b>Description:</b>	MOUSE ANTI BOVINE CD172a
<b>Specificity:</b>	CD172a
<b>Other names:</b>	MyD-1 ANTIGEN, SIRP ALPHA
<b>Format:</b>	Con S/N
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	DH59B
<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).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10
Immunohistology - Frozen	▪			

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

Bovine

### Species Cross Reactivity

Reacts with: Bison, Water Buffalo, Sheep, Horse, Dog, Cat

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

### Product Form

Concentrated tissue culture supernatant - liquid

### Preparation

Concentrated tissue culture supernatant clarified by filtration through a 0.2 micrometer filter

### Buffer Solution

Serum free tissue culture medium containing proprietary protein free supplement

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Cells from multiple species with the final screening of the fusion on cells from dog
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">O46631</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">327666</a>    SIRPA    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	MYD1, PTPNS1, SHPS1, SIRP
<b>Specificity</b>	<p><b>Mouse anti Bovine CD172a, clone DH59B</b>, recognizes bovine CD172a also known as SIRP alpha or MyD-1 antigen. CD172a is a transmembrane signal regulatory protein expressed primarily by macrophages, monocytes, dendritic cells, granulocytes, myeloid progenitors, hematopoietic stem cells, and neurons (<a href="#">Barclay et al. 2006</a>). The extracellular region of SIRP family consists of three immunoglobulin superfamily (IgSF) domains; two IgC and one IgV domain (<a href="#">Barclay et al. 2006</a>).</p> <p>The IgV domain of CD172a binds to CD47 (<a href="#">Hatherley et al. 2007</a>). The binding domain of CD172a is analogous to that of immunoglobulins and T cell receptors and is involved in myeloid cell activation (<a href="#">Berg et al. 2004</a>). However, signaling via CD172a is mainly inhibitory to cell function and phagocytosis (<a href="#">Oldenberg et al. 2001</a>). CD172a expressing cells are stimulated in <i>Mycobacterium tuberculosis</i> infection, influencing migration of dendritic cells and macrophages, phagocytosis, and granuloma formation (<a href="#">Waters et al. 2009</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>Herrmann L.M. <i>et al.</i> (2003) CD21-positive follicular dendritic cells: A possible source of PrPSc in lymph node macrophages of scrapie-infected sheep. <a href="#">Am J Pathol. 162 (4): 1075-81</a></li> <li>Davis W.C. <i>et al.</i> (2007) Use of flow cytometry to identify monoclonal antibodies that recognize conserved epitopes on orthologous leukocyte differentiation antigens in goats, llamas, and rabbits. <a href="#">Vet Immunol Immunopathol. 119 (1-2): 123-30.</a></li> <li>Ibrahim S. <i>et al.</i> (2007) Screening of anti-human leukocyte monoclonal antibodies for reactivity with equine leukocytes. <a href="#">Vet Immunol Immunopathol. 119 (1-2): 63-80.</a></li> <li>Mérant C. <i>et al.</i> (2009) Young foal and adult horse monocyte-derived dendritic cells differ by their degree of phenotypic maturity. <a href="#">Vet Immunol Immunopathol. 131 (1-2): 1-8.</a></li> <li>Contreras G.A. <i>et al.</i> (2010) Lipomobilization in periparturient dairy cows influences the composition of plasma nonesterified fatty acids and leukocyte phospholipid fatty acids. <a href="#">J Dairy Sci. 93 (6): 2508-16.</a></li> <li>Herrmann-Hoesing L.M. <i>et al.</i> (2010) Ovine progressive pneumonia virus capsid antigen as found in CD163- and CD172a-positive alveolar macrophages of persistently</li> </ol>

infected sheep. [Vet Pathol. 47 \(3\): 518-28.](#)

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<b>Storage</b>	Store at +4°C. DO NOT FREEZE. Should this product contain a precipitate we recommend microcentrifugation before use.
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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20389 available at: 20389: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/20389.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/20389.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Useful Reagents

[MOUSE ANTI BOVINE CD14 \(MCA6085\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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)  
'M334801:181203'

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