

## Datasheet: MCA2058G

<b>Description:</b>	MOUSE ANTI BOVINE CD1w2
<b>Specificity:</b>	CD1w2
<b>Other names:</b>	CD1b
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC20
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.25 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	▪			1/25 - 1/50
Immunohistology - Frozen	▪			1/1000
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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: Sheep, Goat, Dog, Horse, 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

Purified IgG - liquid

### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>RRID</b>	AB_566607
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Bovine CD1w2 antibody, clone CC20</b> recognises the bovine CD1w2 cell surface antigen, a glycoprotein heterodimer of ~12 kDa and ~46 kDa. CD1w2 is expressed by dendritic cells, cortical thymocytes and a minority of medullary thymocytes, with a pattern similar to antibodies of the CD1b cluster in humans.
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Hein, W.R. <i>et al.</i> (1991) Summary of workshop findings for leukocyte antigens of sheep. <a href="#">Vet Immunol Immunopathol. 27 (1-3): 28-30.</a></li> <li>2. Howard, C.J. &amp; Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). <a href="#">Vet Immunol Immunopathol. 39 (1-3): 25-47.</a></li> <li>3. Howard, C.J. <i>et al.</i> (1993) Comparison of CD1 monoclonal antibodies on bovine cells and tissues. <a href="#">Vet Immunol Immunopathol. 39 (1-3): 77-83.</a></li> <li>4. Moore, P.F. <i>et al.</i> (1996) Canine cutaneous histiocytoma is an epidermotropic Langerhans cell histiocytosis that expresses CD1 and specific beta 2-integrin molecules. <a href="#">Am J Pathol. 148: 1699-708.</a></li> <li>5. Siedek, E. <i>et al.</i> (1997) Isolation and characterisation of equine dendritic cells. <a href="#">Vet Immunol Immunopathol. 60 (1-2): 15-31.</a></li> <li>6. Rhind, S.M. (2001) CD1--the pathology perspective. <a href="#">Vet Pathol. 38 (6): 611-9.</a></li> <li>7. Affolter, V.K. and Moore, P.F. (2002) Localized and disseminated histiocytic sarcoma of dendritic cell origin in dogs. <a href="#">Vet Pathol. 39: 74-83.</a></li> <li>8. Chan, S.S. <i>et al.</i> (2002) Generation and characterization of ovine dendritic cells derived from peripheral blood monocytes. <a href="#">Immunology. 107: 366-72.</a></li> <li>9. Bienzle, D. <i>et al.</i> (2003) Immunophenotype and functional properties of feline dendritic cells derived from blood and bone marrow. <a href="#">Vet Immunol Immunopathol. 96: 19-30.</a></li> <li>10. McNeilly, T.N. <i>et al.</i> (2006) Differential expression of cell surface markers by ovine respiratory tract dendritic cells. <a href="#">J Histochem Cytochem. 54: 1021-30.</a></li> <li>11. Åkesson, C.P. <i>et al.</i> (2008) Phenotypic characterisation of intestinal dendritic cells in sheep. <a href="#">Dev Comp Immunol. 32: 837-49.</a></li> <li>12. 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: 1-8.</a></li> <li>13. Shu, D. <i>et al.</i> (2009) Cutaneous cytokine gene expression and cellular responses in lambs infested with the louse, <i>Bovicola ovis</i>, and following intradermal injection of crude</li> </ol>

louse antigen. [Vet Immunol Immunopathol. 129: 82-92.](#)

14. Romero-palomo, F. *et al.* (2013) Immunohistochemical detection of dendritic cell markers in cattle. [Vet Pathol. 50 \(6\): 1099-108.](#)

15. Romero-Palomo, F. *et al.* (2017) Immunopathologic Changes in the Thymus of Calves Pre-infected with BVDV and Challenged with BHV-1. [Transbound Emerg Dis. 64 \(2\): 574-84.](#)

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**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2058G>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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