

## Datasheet: MCA2058PE

**BATCH NUMBER 167386**

<b>Description:</b>	MOUSE ANTI BOVINE CD1w2:RPE
<b>Specificity:</b>	CD1w2
<b>Other names:</b>	CD1b
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC20
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS

### 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 - 1/5

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 conjugated to R. Phycoerythrin (RPE) - lyophilized

#### Reconstitution

Reconstitute with 1 ml distilled water

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

#### Preparation

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

supernatant

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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin 5% sucrose
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<b>RRID</b>	AB_609584
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<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
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<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.
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<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
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<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. Mé rant, 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 louse antigen. <a href="#">Vet Immunol Immunopathol. 129: 82-92.</a></li><li>14. Romero-palomo, F. <i>et al.</i> (2013) Immunohistochemical detection of dendritic cell</li></ol>
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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** Prior to reconstitution store at +4°C.  
After reconstitution store at +4°C.  
DO NOT FREEZE.  
This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2058PE>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

**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)

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