

Datasheet: MCA2058PE

BATCH NUMBER 154032

Description:	MOUSE ANTI BOVINE CD1w2:RPE
Specificity:	CD1w2
Other names:	CD1b
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	CC20
Isotype:	IgG2a
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

Where this antibody 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 antibody 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

Buffer Solution	Phosphate buffered saline
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Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
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RRID	AB_609584
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Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
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Specificity	Mouse anti Bovine CD1w2 antibody, clone CC20 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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Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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References	<ol style="list-style-type: none">1. Siedek, E. <i>et al.</i> (1997) Isolation and characterisation of equine dendritic cells. Vet Immunol Immunopathol. 60 (1-2): 15-31.2. Hein, W.R. <i>et al.</i> (1991) Summary of workshop findings for leukocyte antigens of sheep. Vet Immunol Immunopathol. 27 (1-3): 28-30.3. Romero-Palomo, F. <i>et al.</i> (2017) Immunopathologic Changes in the Thymus of Calves Pre-infected with BVDV and Challenged with BHV-1. Transbound Emerg Dis. 64 (2): 574-84.4. Howard, C.J. <i>et al.</i> (1993) Comparison of CD1 monoclonal antibodies on bovine cells and tissues. Vet Immunol Immunopathol. 39 (1-3): 77-83.5. Rhind, S.M. (2001) CD1--the pathology perspective. Vet Pathol. 38 (6): 611-9.6. Howard, C.J. & Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). Vet Immunol Immunopathol. 39 (1-3): 25-47.7. Åkesson, C.P. <i>et al.</i> (2008) Phenotypic characterisation of intestinal dendritic cells in sheep. Dev Comp Immunol. 32: 837-49.8. Chan, S.S. <i>et al.</i> (2002) Generation and characterization of ovine dendritic cells derived from peripheral blood monocytes. Immunology. 107: 366-72.9. 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. Vet Immunol Immunopathol. 129: 82-92.10. McNeilly, T.N. <i>et al.</i> (2006) Differential expression of cell surface markers by ovine respiratory tract dendritic cells. J Histochem Cytochem. 54: 1021-30.11. Mé rant, C. <i>et al.</i> (2009) Young foal and adult horse monocyte-derived dendritic cells differ by their degree of phenotypic maturity. Vet Immunol Immunopathol. 131: 1-8.12. Affolter, V.K. and Moore, P.F. (2002) Localized and disseminated histiocytic sarcoma of dendritic cell origin in dogs. Vet Pathol. 39: 74-83.13. 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.
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[Am J Pathol. 148: 1699-708.](#)

14. Bienze, D. *et al.* (2003) Immunophenotype and functional properties of feline dendritic cells derived from blood and bone marrow. [Vet Immunol Immunopathol. 96: 19-30.](#)

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

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.

Guarantee 12 months from date of despatch

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

Regulatory For research purposes only

Related Products

Recommended Negative Controls

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

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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

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