

Datasheet: MCA2058A647

BATCH NUMBER 152551

Description:	MOUSE ANTI BOVINE CD1w2:Alexa Fluor® 647
Specificity:	CD1w2
Other names:	CD1b
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	CC20
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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

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 Alexa Fluor 647 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665

Preparation

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

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	Ig concentration 0.05 mg/ml
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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. Mérant, 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. Am J Pathol. 148: 1699-708. 14. Bienzle, D. <i>et al.</i> (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 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.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2058A647>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA929A647\)](#)

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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)

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