

## Datasheet: MCA831G

<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>	CC14
<b>Isotype:</b>	IgG1
<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	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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: Goat, Sheep

**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 G from tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>RRID</b>	AB_931691
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Bovine CD1w2 antibody, clone CC14</b> recognizes the CD1w2 cell surface antigen in bovine, sheep and goat.</p> <p>Mouse anti Bovine CD1w2 antibody, clone CC14 immunoprecipitates two protein bands of ~12 kDa and ~46 kDa. In immunohistology the reagent stains cortical thymocytes and a minority of medullary thymocytes, with a pattern similar to antibodies of the CD1b cluster in humans.</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>1. Machugh, N.D. <i>et al.</i> (1988) Characterization of a bovine thymic differentiation antigen analogous to CD1 in the human. <a href="#">Scand J Immunol. 27 (5): 541-7.</a></li> <li>2. (1991) Comparison of reactivity of monoclonal antibodies on bovine, ovine and caprine tissues and on cells from other animal species. <a href="#">Vet Immunol Immunopathol. 27 (1-3): 32-4.</a></li> <li>3. Summers, C. <i>et al.</i> (2012) The distribution of immune cells in the lungs of classical and atypical ovine pulmonary adenocarcinoma. <a href="#">Vet Immunol Immunopathol. 146: 1-7.</a></li> <li>4. Brackenbury, L.S. <i>et al.</i> (2005) Identification of a cell population that produces alpha/beta interferon <i>in vitro</i> and <i>in vivo</i> in response to noncytopathic bovine viral diarrhea virus. <a href="#">J Virol. 79: 7738-44.</a></li> <li>5. Glew, E.J. <i>et al.</i> (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. <a href="#">J Gen Virol. 84: 1771-80.</a></li> <li>6. Jörundsson, E. <i>et al.</i> (2000) Distribution of MHC-II and CD1 molecules in the skin of lambs and changes during experimentally-induced contact hypersensitivity. <a href="#">Vet Immunol Immunopathol. 74: 87-101.</a></li> <li>7. Pirson, C. <i>et al.</i> (2012) Differential effects of <i>Mycobacterium bovis</i> - derived polar and apolar lipid fractions on bovine innate immune cells. <a href="#">Vet Res. 43: 54.</a></li> <li>8. Stephens, S.A. and Howard, C.J. (2002) Infection and transformation of dendritic cells from bovine afferent lymph by <i>Theileria annulata</i>. <a href="#">Parasitology. 124: 485-93.</a></li> <li>9. Valheim, M. <i>et al.</i> (2002) Lesions in subclinical paratuberculosis of goats are associated with persistent gut-associated lymphoid tissue. <a href="#">J Comp Pathol. 127: 194-202.</a></li> <li>10. Corripio-Miyar, Y. <i>et al.</i> (2015) Phenotypic and functional analysis of monocyte populations in cattle peripheral blood identifies a subset with high endocytic and</li> </ol>

allogeneic T-cell stimulatory capacity. [Vet Res. 46 \(1\): 112.](#)

11. Corripio-miyar, Y. *et al.* (2017) 1,25-Dihydroxyvitamin D3 modulates the phenotype and function of Monocyte derived dendritic cells in cattle. [BMC Vet Res. 13 \(1\): 390.](#)

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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: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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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](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),  
[DyLight®800](#), [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<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)  
'M381509:210512'

Printed on 29 Aug 2021

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