Datasheet: MCA831G

Description:	MOUSE ANTI BOVINE CD1w2
Specificity:	CD1w2
Other names:	CD1b
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC14
Isotype:	IgG1
Quantity:	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.

	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

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
RRID	AB_931691
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 CC14** recognizes the CD1w2 cell surface antigen in bovine, sheep and goat. 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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Machugh, N.D. *et al.* (1988) Characterization of a bovine thymic differentiation antigen analogous to CD1 in the human. Scand J Immunol. 27 (5): 541-7. 2. (1991) Comparison of reactivity of monoclonal antibodies on bovine, ovine and caprine tissues and on cells from other animal species. Vet Immunol Immunopathol. 27 (1-3): 32-4. 3. Summers, C. *et al.* (2012) The distribution of immune cells in the lungs of classical and atypical ovine pulmonary adenocarcinoma. Vet Immunol Immunopathol. 146: 1-7. 4. Brackenbury, L.S. *et al.* (2005) Identification of a cell population that produces alpha/beta interferon *in vitro* and *in vivo* in response to noncytopathic bovine viral diarrhea virus. J Virol. 79: 7738-44. 5. Glew, E.J. *et al.* (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. J Gen Virol. 84: 1771-80. 6. Jörundsson, E. *et al.* (2000) Distribution of MHC-II and CD1 molecules in the skin of lambs and changes during experimentally-induced contact hypersensitivity. Vet Immunol Immunopathol. 74: 87-101. 7. Pirson, C. *et al.* (2012) Differential effects of *Mycobacterium bovis* - derived polar and apolar lipid fractions on bovine innate immune cells. Vet Res. 43: 54. 8. Stephens, S.A. and Howard, C.J. (2002) Infection and transformation of dendritic cells from bovine afferent lymph by *Theileria annulata*. Parasitology. 124: 485-93. 9. Valheim, M. *et al.* (2002) Lesions in subclinical paratuberculosis of goats are associated with persistent gut-associated lymphoid tissue. J Comp Pathol. 127: 194-202. 10. Corripio-Miyar, Y. *et al.* (2015) Phenotypic and functional analysis of monocyte populations in cattle peripheral blood identifies a subset with high endocytic and

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.

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
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA831G 10040
Regulatory	For research purposes only

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
Rabbit Anti Mouse IgG (STAR9...)	FITC
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 (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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
Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: 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
'M381509:210512'

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