

Datasheet: MCA833GA

BATCH NUMBER 1601

Description:	MOUSE ANTI BOVINE CD2
Specificity:	CD2
Other names:	LFA-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC42
Isotype:	IgG1
Quantity:	0.1 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	▪			1/10 - 1/20
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.

EDTA pH8.0 is recommended for this purpose.

Target Species	Bovine
Species Cross Reactivity	Reacts with: Goat 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 (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Fusion Partners	Spleen cells from an immunised mouse were fused with cells of the mouse NS1 myeloma cell line
Specificity	Mouse anti Bovine CD2, clone CC42 , recognizes the bovine homologue of human CD2. Clone CC42 inhibits rosetting with SRBC and stains cells in primary and secondary lymphoid organs in patterns consistent with those seen by human CD2 monoclonal antibodies.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	1. Davis, W.C. & Splitter, G.S. (1991) Individual antigens of cattle. Bovine CD2 (BoCD2). Vet Immunol Immunopathol. 27: 43-50. 2. Sopp, P. <i>et al.</i> (1991) Investigating monoclonal antibodies to bovine "null" cell antigens using two-colour immunofluorescence. Vet Immunol Immunopathol. 27 (1-3): 163-8. 3. Eskra, L. <i>et al.</i> (1991) Effect of monoclonal antibodies on in vitro function of T-cell subsets. Vet Immunol Immunopathol. 27 (1-3): 215-22. 4. Gutierrez, M. <i>et al.</i> (1999) The detection of CD2+, CD4+, CD8+, and WC1+ T lymphocytes, B cells and macrophages in fixed and paraffin embedded bovine tissue using a range of antigen recovery and signal amplification techniques. Vet Immunol Immunopathol. 71 (3-4): 321-34. 5. Fikri, Y. <i>et al.</i> (2000) Purification and characterisation of bovine WC1+ gammadelta T lymphocytes from peripheral blood. Vet Res. 31: 229-39. 6. Brackenbury, L.S. <i>et al.</i> (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. 7. Wilson, E. <i>et al.</i> (1999) A circulating bovine gamma delta T cell subset, which is found in large numbers in the spleen, accumulates inefficiently in an artificial site of inflammation: correlation with lack of expression of E-selectin ligands and L-selectin. J Immunol. 162: 4914-9. 8. Weiss, D.J. <i>et al.</i> (2006) Mucosal immune response in cattle with subclinical Johne's disease. Vet Pathol. 43: 127-35.

9. Grell, S.N. *et al.* (2005) Age-dependent differences in cytokine and antibody responses after experimental RSV infection in a bovine model. [Vaccine 23: 3412-23.](#)
10. Faldyna, M. *et al.* (1999) Leukocyte counts and lymphocyte subpopulations in the peripheral blood of pygmy goats from herd infected with *Mycobacterium avium* subspecies *paratuberculosis*. [Vet. Med. Czech 44: 259-62](#)
11. Faldyna, M. *et al.* (2006) $\gamma\delta$ -TCR+ CD2- lymphocytes are recruited into bovine mammary gland after stimulation. [Veterinarni Medicina, 51: 258-64.](#)
12. Slama, P. *et al.* (2009) Effect of *Staphylococcus aureus* and *Streptococcus uberis* on apoptosis of bovine mammary gland lymphocytes. [Res Vet Sci. 87: 233-8.](#)
13. Bednarek, D. *et al.* (2003) Effect of steroidal and non-steroidal anti-inflammatory drugs in combination with long-acting oxytetracycline on non-specific immunity of calves suffering from enzootic bronchopneumonia. [Vet Microbiol. 96: 53-67.](#)
14. Hamilton, C.A. *et al.* (2017) Frequency and phenotype of natural killer cells and natural killer cell subsets in bovine lymphoid compartments and blood. [Immunology. 151 \(1\): 89-97.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. 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 #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA833GA>
10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , 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
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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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