

Datasheet: MCA833F

BATCH NUMBER 1807

Description:	MOUSE ANTI BOVINE CD2:FITC
Specificity:	CD2
Other names:	LFA-2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CC42
Isotype:	IgG1
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 - 1/10

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

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

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 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1mg/ml
RRID	AB_2073687
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	<ol style="list-style-type: none"> Davis, W.C. & Splitter, G.S. (1991) Individual antigens of cattle. Bovine CD2 (BoCD2). Vet Immunol Immunopathol. 27: 43-50. 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. 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. 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. Fikri, Y. <i>et al.</i> (2000) Purification and characterisation of bovine WC1+ gammadelta T lymphocytes from peripheral blood. Vet Res. 31: 229-39. 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. 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. Weiss, D.J. <i>et al.</i> (2006) Mucosal immune response in cattle with subclinical Johne's disease. Vet Pathol. 43: 127-35. Grell, S.N. <i>et al.</i> (2005) Age-dependent differences in cytokine and antibody responses after experimental RSV infection in a bovine model. Vaccine 23: 3412-23. Faldyna, M. <i>et al.</i> (1999) Leukocyte counts and lymphocyte subpopulations in the peripheral blood of pygmy goats from herd infected with <i>Mycobacterium avium</i> subspecies <i>paratuberculosis</i>. Vet. Med. Czech 44: 259-62 Faldyna, M. <i>et al.</i> (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. This product is photosensitive and should be protected from light.

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 #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA833F10041>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

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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
'M369029:200529'

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