

Datasheet: MCA833A647

Description:	MOUSE ANTI BOVINE CD2:Alexa Fluor® 647
Specificity:	CD2
Other names:	LFA-2
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	CC42
Isotype:	IgG1
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 - 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 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	IgG concentration 0.05 mg/ml
External Database Links	UniProt: Q148M9 Related reagents
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"> 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. <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. 10. Bednarek, D. <i>et al.</i> (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. 11. Hamilton, C.A. <i>et al.</i> (2017) Frequency and phenotype of natural killer cells and natural

killer cell subsets in bovine lymphoid compartments and blood. [Immunology. 151 \(1\): 89-97.](#)

12. Elsayed, M.S.A.E. *et al.* (2022) Real-time PCR using atpE, conventional PCR targeting different regions of difference, and flow cytometry for confirmation of *Mycobacterium bovis*. in buffaloes and cattle from the Delta area of Egypt. [BMC Microbiol. 22 \(1\): 154.](#)

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/MCA833A647>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M402771:220720'

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