

Datasheet: MCA2437F

Description:	MOUSE ANTI BOVINE CD86:FITC
Specificity:	CD86
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	IL-A190
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	▪			Neat - 1/10
Immunofluorescence			▪	

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: 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 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 A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
External Database Links	UniProt: Q1JPC5 Related reagents
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line.
Specificity	Mouse anti Bovine CD86 antibody, clone IL-A190 recognizes the bovine CD86 cell surface antigen, expressed by dendritic cells, activated macrophages and activated B cells. CD86 plays an important role in co-stimulation of T cells in the primary immune response.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> Norimatsu, M. <i>et al.</i> (2003) Differential response of bovine monocyte-derived macrophages and dendritic cells to infection with Salmonella typhimurium in a low-dose model in vitro. Immunology. 108: 55-61. Glew, E.J. <i>et al.</i> (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. J Gen Virol. 84 (Pt 7): 1771-80. Rhodes, S.G. <i>et al.</i> (2003) 1,25-dihydroxyvitamin D3 and development of tuberculosis in cattle. Clin Diagn Lab Immunol. 10 (6): 1129-35. Epardaud, M. <i>et al.</i> (2004) Enrichment for a CD26hi SIRP- subset in lymph dendritic cells from the upper aero-digestive tract. J Leukoc Biol. 76 (3): 553-61. Langelaar, M.F. <i>et al.</i> (2005) <i>Mycobacterium avium ssp. paratuberculosis</i> recombinant heat shock protein 70 interaction with different bovine antigen-presenting cells. Scand J Immunol. 61: 242-50 Bonneau, M. <i>et al.</i> (2006) Migratory monocytes and granulocytes are major lymphatic carriers of Salmonella from tissue to draining lymph node. J Leukoc Biol. 79: 268-76. Pascale, F. <i>et al.</i> (2008) Plasmacytoid dendritic cells migrate in afferent skin lymph. J Immunol. 180: 5963-72. Hemati, B. <i>et al.</i> (2009) Bluetongue virus targets conventional dendritic cells in skin lymph. J Virol. 83: 8789-99. Ruscanu, S. <i>et al.</i> (2012) The double-stranded RNA bluetongue virus induces type I interferon in plasmacytoid dendritic cells via a MYD88-dependent TLR7/8-independent signaling pathway. J Virol. 2012 May;86: 5817-28. Mauro, A. <i>et al.</i> (2016) M1 and M2 macrophage recruitment during tendon regeneration induced by amniotic epithelial cell allotransplantation in ovine. Res Vet Sci. 105: 92-102. Corripio-miyar, Y. <i>et al.</i> (2017) 1,25-Dihydroxyvitamin D3 modulates the phenotype and function of Monocyte derived dendritic cells in cattle. BMC Vet Res. 13 (1): 390. Liu, J. <i>et al.</i> (2020) <i>Theileria annulata</i>. transformation altered cell surface molecules expression and endocytic function of monocyte-derived dendritic cells. Ticks Tick Borne

[Dis. 11 \(3\): 101365.](#)

13. Marzo, S. *et al.* (2021) Characterisation of dendritic cell frequency and phenotype in bovine afferent lymph reveals kinetic changes in costimulatory molecule expression [Vet Immunol Immunopathol. 19 Nov: 110363.](#)

14. Stabel, J.R. *et al.* (2022) B cell phenotypes and maturation states in cows naturally infected with *Mycobacterium avium* subsp. *Paratuberculosis*. [PLoS One. 17 \(12\): e0278313.](#)

15. Russo, V. *et al.* (2022) Tendon Healing Response Is Dependent on Epithelial-Mesenchymal-Tendon Transition State of Amniotic Epithelial Stem Cells. [Biomedicines. 10 \(5\): 1177.](#)

16. Wherry, T.L.T. *et al.* (2022) Effects of 1,25-Dihydroxyvitamin D₃ and 25-Hydroxyvitamin D₃ on PBMCs From Dairy Cattle Naturally Infected With *Mycobacterium avium* subsp. *paratuberculosis*. [Front Vet Sci. 9: 830144.](#)

17. Zenobi, M.G. *et al.* (2020) Effect of prepartum energy intake and supplementation with ruminally protected choline on innate and adaptive immunity of multiparous Holstein cows. [J Dairy Sci. 103 \(3\): 2200-16.](#)

18. Zhou, X. *et al.* (2022) Dusp6 deficiency attenuates neutrophil-mediated cardiac damage in the acute inflammatory phase of myocardial infarction. [Nat Commun. 13 \(1\): 6672.](#)

19. Kornuta, C.A. *et al.* (2025) Galectin-8 and GEL01 as potential adjuvants to enhance the immune response induced by a DNA vaccine against bovine alphaherpesvirus Type-1. [Virology. 604: 110402.](#)

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. This product is photosensitive and should be protected from light.

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/MCA2437F>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

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

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

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