

## Datasheet: MCA2437F

**BATCH NUMBER 160235**

<b>Description:</b>	MOUSE ANTI BOVINE CD86:FITC
<b>Specificity:</b>	CD86
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	IL-A190
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">Q1JPC5</a> <a href="#">Related reagents</a>
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Bovine CD86 antibody, clone IL-A190</b> recognises the bovine CD86 cell surface antigen, which is 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.
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>1. 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. <a href="#">Scand J Immunol. 61: 242-50</a></li> <li>2. Rhodes, S.G. <i>et al.</i> (2003) 1,25-dihydroxyvitamin D3 and development of tuberculosis in cattle. <a href="#">Clin Diagn Lab Immunol. 10 (6): 1129-35.</a></li> <li>3. Glew, E.J. <i>et al.</i> (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. <a href="#">J Gen Virol. 84 (Pt 7): 1771-80.</a></li> <li>4. Epardaud, M. <i>et al.</i> (2004) Enrichment for a CD26hi SIRP- subset in lymph dendritic cells from the upper aero-digestive tract. <a href="#">J Leukoc Biol. 76 (3): 553-61.</a></li> <li>5. Bonneau, M. <i>et al.</i> (2006) Migratory monocytes and granulocytes are major lymphatic carriers of Salmonella from tissue to draining lymph node. <a href="#">J Leukoc Biol. 79: 268-76.</a></li> <li>6. 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. <a href="#">Immunology. 108: 55-61.</a></li> <li>7. Hemati, B. <i>et al.</i> (2009) Bluetongue virus targets conventional dendritic cells in skin lymph. <a href="#">J Virol. 83: 8789-99.</a></li> <li>8. Pascale, F. <i>et al.</i> (2008) Plasmacytoid dendritic cells migrate in afferent skin lymph. <a href="#">J Immunol. 180: 5963-72.</a></li> <li>9. 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. <a href="#">J Virol. 2012 May;86: 5817-28.</a></li> <li>10. Mauro, A. <i>et al.</i> (2016) M1 and M2 macrophage recruitment during tendon regeneration induced by amniotic epithelial cell allotransplantation in ovine. <a href="#">Res Vet Sci. 105: 92-102.</a></li> <li>11. Corripio-miyar, Y. <i>et al.</i> (2017) 1,25-Dihydroxyvitamin D3 modulates the phenotype and function of Monocyte derived dendritic cells in cattle. <a href="#">BMC Vet Res. 13 (1): 390.</a></li> </ol>

12. 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.](#)
13. Wherry, T.L.T. *et al.* (2022) Effects of 1,25-Dihydroxyvitamin D<sub>3</sub> and 25-Hydroxyvitamin D<sub>3</sub> on PBMCs From Dairy Cattle Naturally Infected With *Mycobacterium avium* subsp. *paratuberculosis*. [Front Vet Sci. 9: 830144.](#)
14. Liu, J. *et al.* (2020) *Theileria annulata*. transformation altered cell surface molecules expression and endocytic function of monocyte-derived dendritic cells. [Ticks Tick Borne Dis. 11 \(3\): 101365.](#)
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. 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.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://bio-rad-antibodies.com/datasheets)  
'M394018:220201'

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