Datasheet: MCA2437A647

Description:	MOUSE ANTI BOVINE CD86:Alexa Fluor® 647
Specificity:	CD86
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	IL-A190
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

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.

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 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:** 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, cllone 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	1. Norimatsu, M. *et al.* (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. 2. Glew, E.J. *et al.* (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. J Gen Virol. 84 (Pt 7): 1771-80. 3. Rhodes, S.G. *et al.* (2003) 1,25-dihydroxyvitamin D3 and development of tuberculosis in cattle. Clin Diagn Lab Immunol. 10 (6): 1129-35. 4. Epardaud, M. *et al.* (2004) Enrichment for a CD26hi SIRP- subset in lymph dendritic cells from the upper aero-digestive tract. J Leukoc Biol. 76 (3): 553-61. 5. Langelaar, M.F. *et al.* (2005) *Mycobacterium avium ssp. paratuberculosis* recombinant heat shock protein 70 interaction with different bovine antigen-presenting cells. Scand J Immunol. 61: 242-50 6. Bonneau, M. *et al.* (2006) Migratory monocytes and granulocytes are major lymphatic carriers of Salmonella from tissue to draining lymph node. J Leukoc Biol. 79: 268-76. 7. Pascale, F. *et al.* (2008) Plasmacytoid dendritic cells migrate in afferent skin lymph. J Immunol. 180: 5963-72. 8. Hemati, B. *et al.* (2009) Bluetongue virus targets conventional dendritic cells in skin lymph. J Virol. 83: 8789-99. 9. Ruscanu, S. *et al.* (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. 10. Mauro, A. *et al.* (2016) M1 and M2 macrophage recruitment during tendon regeneration induced by amniotic epithelial cell allotransplantation in ovine. Res Vet Sci. 105: 92-102. 11. Corripio-miyar, Y. *et al.* (2017) 1,25-Dihydroxyvitamin D3 modulates the phenotype and function of Monocyte derived dendritic cells in cattle. BMC Vet Res. 13 (1): 390. 12. 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.
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 D_3 and 25-Hydroxyvitamin D_3 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.
Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2437A647 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA928A647)

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

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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