

Datasheet: MCA2436GA

BATCH NUMBER 162889

Description:	MOUSE ANTI BOVINE CD80
Specificity:	CD80
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	IL-A159
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	▪			1/25 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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	<p>Reacts with: Sheep</p> <p>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.</p>
Product Form	Purified IgG - liquid
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)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
External Database Links	UniProt: O46405 Related reagents
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line.
Specificity	Mouse anti Bovine CD80 antibody, clone IL-A159 recognizes the bovine CD80 cell surface antigen, expressed by dendritic cells, activated macrophages and activated B cells. CD80 plays a key role in co-stimulation of T cells during 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"> 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</i> ssp. <i>paratuberculosis</i> recombinant heat shock protein 70 interaction with different bovine antigen-presenting cells. Scand J Immunol. 61 (3): 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. Hart, J. <i>et al.</i> (2011) <i>Theileria annulata</i>-transformed cell lines are efficient antigen-presenting cells for <i>in vitro</i> analysis of CD8 T cell responses to bovine herpesvirus-1. Vet Res. 42: 119. Ikebuchi, R. <i>et al.</i> (2013) Blockade of bovine PD-1 increases T cell function and inhibits bovine leukemia virus expression in B cells <i>in vitro</i>. Vet Res. 44: 59. Totté P <i>et al.</i> (2015) Free exopolysaccharide from <i>Mycoplasma mycoides</i> subsp. <i>mycoides</i> possesses anti-inflammatory properties. Vet Res. 46 (1): 122. 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. Risalde, M.A. <i>et al.</i> (2020) BVDV permissiveness and lack of expression of co-stimulatory molecules on PBMCs from calves pre-infected with BVDV. Comp Immunol Microbiol Infect Dis. 68: 101388. Edwards, J.H. <i>et al.</i> (2021) Integration and functional performance of a decellularised

porcine superflexor tendon graft in an ovine model of anterior cruciate ligament reconstruction. [Biomaterials. 279: 121204.](#)

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. 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.](#)

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. Vafae, T. *et al.* (2022) Repopulation of decellularised porcine pulmonary valves in the right ventricular outflow tract of sheep: Role of macrophages. [J Tissue Eng. 13: 20417314221102680.](#)

16. Wu, H. *et al.* (2023) Electrical stimulation of piezoelectric BaTiO₃ coated Ti6Al4V scaffolds promotes anti-inflammatory polarization of macrophages and bone repair via MAPK/JNK inhibition and OXPHOS activation. [Biomaterials. 293: 121990.](#)

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.
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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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2436GA 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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America Fax: +1 919 878 3751

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Europe

Tel: +49 (0) 89 8090 95 21

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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

'M383827:210513'

Printed on 01 Dec 2023

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