

Datasheet: MCA2445A647

Description:	MOUSE ANTI BOVINE MHC CLASS II MONOMORPHIC:Alexa Fluor® 647
Specificity:	MHC CLASS II MONOMORPHIC
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	IL-A21
Isotype:	lgG2a
Quantity:	100 TESTS/1ml

Product Details

Applications	This product has been reported to work in the following applications. This informati 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 <u>www.bio-</u> rad-antibodies com/protocols				ons. This information is ations or personal indicated for further www.bio-
		Yes N	No	Not Determined	Suggested Dilution
	Flow Cytometry	-			Neat - 1/10
	Where this antibody h	as not been test	ed for us	e in a particular te	echnique this does not
	necessarily exclude its a guide only. It is reco system using appropri	s use in such pro mmended that t ate negative/pos	ocedures he user ti sitive con	. Suggested worki trates the antibod trols.	ng dilutions are given as y for use in their own
Target Species	Bovine				
Product Form	Purified IgG conjugate	ed to Alexa Fluor	r 647 - liq	uid	
Max Ex/Em	Fluorophore	Excitation Max	(nm) Er	nission Max (nm)	
	Alexa Fluor®647	650		665	
Preparation	Purified IgG prepared supernatant	by affinity chron	natograpł	ny on Protein G fro	om tissue culture
Buffer Solution	Phosphate buffered saline				
Preservative	0.09% Sodium Azide (NaN ₃)				
Stabilisers	1% Bovine Serum Alb	umin			
Approx. Protein Concentrations	IgG concentration 0.08	5 mg/ml			
Fusion Partners	Spleen cells from imm	unised BALB/c	mice wer	e fused with cells	of the X63.Ag8.653

myeloma cell line.

Specificity	Mouse anti Bovine MHC Class II Monomorphic antibody, clone IL-A21 recognizes a monomorphic epitope within the bovine MHC II cell surface antigen. Clone IL-A21 is reported to react with an epitope which is common to both BoLA DR and DQ (Howard et al.1997).Expression of MHC II molecules have been demonstrated on bovine B cells, activated T cells, alveolar macrophages, monocytes and mammary and bronchial epithelial cells.Clone IL-A21 is reported to inhibit T cell proliferation following FMDV infection (Collen et al. 1991).
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^{6} cells in 100ul.
References	 Collen, T. <i>et al.</i> (1991) A T cell epitope in VP1 of foot-and-mouth disease virus is immunodominant for vaccinated cattle. J Immunol. 146 (2): 749-55. Davies, C.J. <i>et al.</i> (1992) Characterization of bovine MHC class II polymorphism using three typing methods: serology, RFLP and IEF. <u>Eur J Immunogenet. 19 (5): 253-62.</u> Demartini, J.C. <i>et al.</i> (1993) Differential <i>in vitro</i> and <i>in vivo</i> expression of MHC class II antigens in bovine lymphocytes infected by <i>Theileria parva.</i> Vet Immunol Immunopathol. <u>35 (3-4): 253-73.</u> Howard, C.J. <i>et al.</i> (1997) Identification of two distinct populations of dendritic cells in afferent lymph that vary in their ability to stimulate T cells. J Immunol. 159 (11): 5372-82. Daubenberger, C. <i>et al.</i> (1999) Bovine gammadelta T-cell responses to the intracellular protozoan parasite <i>Theileria parva</i> Infect Immun. 67:2241-9. Ballingall, K. <i>et al.</i> (2001) Transcription of the unique ruminant class II major histocompatibility complex-DYA and DIB genes in dendritic cells. <u>Eur J Immunol. 31 (1):</u> <u>82-6.</u> Sathiyaseelan, T. <i>et al.</i> (2002) Immunological characterization of a gammadelta T-cell stimulatory ligand on autologous monocytes. <u>Immunology. 105:181-9</u> Constantinoiu, C.C. <i>et al.</i> (2010) Local immune response against larvae of <i>Rhipicephalus</i> (Boophilus) microplus in Bos taurus indicus and Bos taurus taurus cattle. Int J Parasitol. 40: 865-75. Dorneles, E.M. <i>et al.</i> (2015) Immune Response of Calves Vaccinated with <i>Brucella abortus</i> S19 or RB51 and Revaccinated with RB51. <u>PLoS One. 10 (9): e0136696.</u> 10. Sei, J.J. <i>et al.</i> (2016) Effect of Foot-and-Mouth Disease Virus Infection on the Frequency, Phenotype and Function of Circulating Dendritic Cells in Cattle. <u>PLoS One. 11</u> (3): e0152192. Choi, K.S. (2017) The effect of bovine viral diarrhea virus on bovine monocyte phenotype. Iran J Vet Res. 18 (1): 13-17. Pérez-caballero, R. <i>et al.</i>

	uterine washings in cows before and after intrauterine add methisoprinol. <u>Anim Sci J. 91 (1): e13306.</u> 15. Casaro, S. <i>et al.</i> (2022) Flow cytometry panels for imm peripheral blood leukocytes <u>Vet Immunol Immunopathol.</u> 16. Marzo, S. <i>et al.</i> (2022) Characterisation of dendritic co bovine afferent lymph reveals kinetic changes in costimul <u>Immunol Immunopathol. 243: 110363.</u>	ministration of cefapirin and munophenotyping dairy cattle 248: 110417. ell frequency and phenotype in atory molecule expression <u>Vet</u>
Storage	This product is shipped at ambient temperature. It is reco -20°C on receipt. When thawed, aliquot the sample as ne short term use (up to 4 weeks) and store the remaining a	mmended to aliquot and store at eded. Keep aliquots at 2-8°C for liquots at -20°C.
	Avoid repeated freezing and thawing as this may denatur frost-free freezers is not recommended.	e the antibody. Storage in
Guarantee	12 months from date of despatch	
Acknowledgements	This product is provided under an intellectual property lice Corporation. The transfer of this product is contingent on product solely in research, excluding contract research or and the buyer must not sell or otherwise transfer this pro- diagnostic, therapeutic or prophylactic purposes; (b) testin services, or information in return for compensation on a p or quality assurance or quality control, or (d) resale, whet research. For information on purchasing a license to this as described above, contact Life Technologies Corporation CA 92008 USA or outlicensing@thermofisher.com	ence from Life Technologies the buyer using the purchased any fee for service research, duct or its components for (a) ng, analysis or screening er-test basis; (c) manufacturing her or not resold for use in product for purposes other than on, 5791 Van Allen Way, Carlsbad
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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 'M441991:250528'

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