Datasheet: MCA1781A647 BATCH NUMBER 167079

Description:	MOUSE ANTI CANINE CD21:Alexa Fluor® 64			
Specificity:	CD21			
Format:	ALEXA FLUOR® 647			
Product Type:	Monoclonal Antibody			
Clone:	CA2.1D6			
lsotype:	lgG1			
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 <u>www.bio-rad-antibodies.com/protocols</u> .					
		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	-			Neat - 1/10	
	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	Dog					
Species Cross Reactivity	Reacts with: Horse, Cat, Raccoon 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 Alexa Fluor®647	Excitation Ma	x (nm)	Emission Max (nm) 665		
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant					
Buffer Solution	Phosphate buffered sa	line				

Preservative Stabilisers	0.09% sodium azide (NaN ₃) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.05mg/ml
RRID	AB_1658137
Specificity	Mouse anti Canine CD21 antibody, clone CA2.1D6 recognizes canine CD21, also known as Complement receptor type 2. CD21 is a cell surface antigen expressed by canine B lymphocytes.
	The antigen recognized may be the canine homologue of human CD21, but this has not been fully confirmed.
	Mouse anti Canine CD21 antibody , clone CA2.1D6 also recognizes the CD21 antigen in Felids. Expression in cats is analogous to that seen in dogs with strong expression on lymphocytes, in a manner mutually exclusive with expression of CD4 or CD8. Mouse anti Canine CD21 antibody, clone CA2.1D6 immunoprecipitates a ~145 kDa protein from feline lymphocytes, similar to the protein immunoprecipitated by the antibody from canine lymphocytes (<u>Dean <i>et al.</i> 1996</u>).
Flow Cytometry	Use 10μ I of the suggested working dilution to label 10^6 cells or 100μ I whole blood
References	 Cobbold, S. & Metcalfe, S. (1994) Monoclonal antibodies that define canine homologues of human CD antigens: summary of the First International Canine Leukocyte Antigen Workshop (CLAW). <u>Tissue Antigens. 43 (3): 137-54.</u> Dean, G.A. <i>et al.</i> (1996) Proviral burden and infection kinetics of feline immunodeficiency virus in lymphocyte subsets of blood and lymph node. <u>J Virol. 70 (8):</u> <u>5165-9</u>. Brodersen, R. <i>et al.</i> (1998) Analysis of the immunological cross reactivities of 213 well characterized monoclonal antibodies with specificities against various leucocyte surface antigens of human and 11 animal species. <u>Vet Immunol Immunopathol. 64 (1): 1-13.</u> Hsiao, Y.W. <i>et al.</i> (2004) Tumor-infiltrating lymphocyte secretion of IL-6 antagonizes tumor-derived TGF-beta 1 and restores the lymphokine-activated killing activity. <u>J</u> <u>Immunol. 172: 1508-14.</u> Horn, P.A. <i>et al.</i> (2004) Efficient lentiviral gene transfer to canine repopulating cells using an overnight transduction protocol. <u>Blood. 103: 3710-6.</u> Faldyna, M. <i>et al.</i> (2004) Lymphocyte subsets in synovial fluid from clinically healthy joints of dogs. <u>Acta Vet. Brno 73: 73-8.</u> Jubala, C.M. <i>et al.</i> (2007) Injection of a recombinant AAV serotype 2 into canine skeletal muscles evokes strong immune responses against transgene products. <u>Gene Ther. 14:</u> <u>1249-60.</u> Wang, Y.S. <i>et al.</i> (2007) Characterization of canine monocyte-derived dendritic cells with phenotypic and functional differentiation. <u>Can J Vet Res. 71: 165-74.</u> Huang, Y.C. <i>et al.</i> (2008) CD5-low expression lymphocytes in canine peripheral blood

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	B cells Activation <u>Veterinary Microbiology. : 110087.</u>				
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				
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1781A647 10041				
Regulatory	For research purposes only				

Related Products

Recommended Negative Controls

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

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

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Printed on 15 Apr 2024

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