

# Datasheet: MCA1038F

Description:	RAT ANTI DOG CD4:FITC			
Specificity:	CD4			
Format:	FITC			
Product Type:	Monoclonal Antibody			
Clone:	YKIX302.9			
lsotype:	lgG2a			
Quantity:	100 TESTS			

## **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 Diluti						
	Flow Cytometry	•			Neat		
	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	Dog						
Product Form	Purified IgG conjugate	ed to Fluoresc	ein Isoth	iocyanate Isomer 1 (l	FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation M	ax (nm)	Emission Max (nm)			
	FITC	490		525			
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin						
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml						
Immunogen	Canine concanavilin A activated T cell blasts.						

External Database Links	UniProt:				
LIIKS	P33705 Related reagents				
	Entrez Gene:				
	403931 CD4 Related reagents				
RRID	AB_321271				
Fusion Partners	Spleen cells from immunized DA rats were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line.				
Specificity	ityRat anti Dog CD4 antibody, clone YKIX302.9, is a monoclonal antibody specific for the canine CD4 cell surface antigen. Clone YKIX302.9 was clustered at the first Canine Leukocyte Antigen Workshop (CLAW) [Cobbold et al. 1992] along with clone CA13.1E4.Rat anti Dog CD4 antibody, clone YKIX302.9 partially depletes circulating T lymphocytes when administered <i>in vivo</i> , but alone is not sufficient to prolong allograft survival in a 				
	Uniquely amongst mammals, canine CD4 is expressed by neutrophils as well as by lymphocyte subsets (Moore <i>et al.</i> 1992).				
Flow Cytometry	Use 10 $\mu$ l of the suggested working dilution to label 10 <sup>6</sup> cells or 100 $\mu$ l whole blood				
References	<ol> <li>Use 10µl of the suggested working dilution to label 10° cells or 100µl whole blood</li> <li>Watson, C.J. <i>et al.</i> (1993) CD4 and CD8 monoclonal antibody therapy: strategies to prolong renal allograft survival in the dog. <u>Br J Surg. 80 (11): 1389-92.</u></li> <li>Gorman, S.D. <i>et al.</i> (1994) Isolation and expression of cDNA encoding the canine CD4 and CD8 alpha antigens. <u>Tissue Antigens. 43 (3): 184-8.</u></li> <li>Out, T.A. <i>et al.</i> (2002) Local T-cell activation after segmental allergen challenge in the lungs of allergic dogs. <u>Immunology. 105: 499-508.</u></li> <li>Benyacoub, J. <i>et al.</i> (2003) Supplementation of food with <i>Enterococcus faecium</i> (SF68) stimulates immune functions in young dogs. <u>J Nutr. 133: 1158-62.</u></li> <li>Bauer, T.R. Jr. <i>et al.</i> (2006) Correction of the disease phenotype in canine leukocyte adhesion deficiency using <i>ex vivo</i> hematopoietic stem cell gene therapy. <u>Blood. 108: 3313-20.</u></li> <li>Reis, A.B. <i>et al.</i> (2006) Phenotypic features of circulating leucocytes as immunological markers for clinical status and bone marrow parasite density in dogs naturally infected by <i>Leishmania chagasi.</i> <u>Clin Exp Immunol. 146: 303-11.</u></li> <li>Miranda, S. <i>et al.</i> (2008) CC chemokine receptor 4-positive CD4(+) lymphocytes in peripheral blood increases during maturation in healthy beagles. <u>J Vet Med Sci. 70 (9): 989-92.</u></li> <li>Papadogiannakis, E.I. <i>et al.</i> (2009) Determination of intracellular cytokines IFN-gamma and IL-4 in canine T lymphocytes by flow cytometry following whole-blood culture. <u>Can J Vet Res. 73 (2): 137-43.</u></li> </ol>				

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Storage	This product is shipped at ambient temperature. It is recommended	I to aliquot and store at			
-	-20°C on receipt. When thawed, aliquot the sample as needed. Kee	•			
	short term use (up to 4 weeks) and store the remaining aliquots at				
	Avoid repeated freezing and thawing as this may denature the antil	body Storage in			
	frost-free freezers is not recommended. This product is photosensit	, ,			
	protected from light.				
	protociou nonnight.				
Guarantee	12 months from date of despatch				
Health And Safety	Material Safety Datasheet documentation #10041 available at:				
Information	https://www.bio-rad-antibodies.com/SDS/MCA1038F				
	10041				
Pagulator:					
Regulatory	For research purposes only				

### **Related Products**

#### **Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL:FITC (MCA6005F) RAT IgG2a NEGATIVE CONTROL:FITC (MCA1212F)

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	То
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.comd a	
batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M407907:221010'						

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