

Datasheet: MCA1038F

Description:	RAT ANTI DOG CD4:FITC
Specificity:	CD4
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	YKIX302.9
Isotype:	IgG2a
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.

	Yes	No	Not Determined	Suggested Dilution
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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	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: P33705 CD4_CANFA Related reagents
	Entrez Gene: 403931 CD4 Related reagents

Fusion Partners Spleen cells from immunised DA rats were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line.

Specificity MCA1038F recognises the canine CD4 cell surface antigen. The antibody has been shown to block MHCII dependent T cell responses *in vivo* and *in vitro*. In the dog CD4 is expressed by neutrophils as well as by lymphocytes subsets.

Flow Cytometry Use 10ul of the suggested working dilution to label 10^6 cells or 100ul whole blood. Method sheets are available on request.

References

1. 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). [Tissue Antigens 43\(3\): 137-154.](#)
2. Gorman, S. *et al.* (1994) Isolation and expression of cDNA encoding the canine CD4 and CD8a antigens. [Tissue Antigens 43\(3\): 184-188.](#)
3. Watson, C.J.E. *et al.* (1993) CD4 and CD8 monoclonal antibody therapy: strategies to prolong renal allograft survival in the dog. [Brit. J. Surg. 80: 1389-1392.](#)
4. Papadogiannakis, E.I. *et al.* (2009) Determination of intracellular cytokines IFN-gamma and IL-4 in canine T lymphocytes by flow cytometry following whole-blood culture. [Can J Vet Res. 73: 137-143.](#)
5. Bauer, T.R. Jr. *et al.* (2006) Correction of the disease phenotype in canine leukocyte adhesion deficiency using ex vivo hematopoietic stem cell gene therapy. [Blood. 108: 3313-20.](#)
6. Boggiatto, P.M. *et al.* (2010) Immunologic indicators of clinical progression during canine Leishmania infantum infection. [Clin Vaccine Immunol. 17: 267-73.](#)
7. Araújo, M.S. *et al.* (2011) Immunological changes in canine peripheral blood leukocytes triggered by immunization with first or second generation vaccines against canine visceral leishmaniasis. [Vet Immunol Immunopathol. 141: 64-75.](#)
8. Benyacoub, J. *et al.* (2003) Supplementation of food with Enterococcus faecium (SF68) stimulates immune functions in young dogs. [J Nutr. 133: 1158-62.](#)
9. Bund, D. *et al.* (2010) Canine-DCs using different serum-free methods as an approach to provide an animal-model for immunotherapeutic strategies. [Cell Immunol. 263: 88-98.](#)
10. Estrela-Lima, A. *et al.* (2010) Immunophenotypic features of tumor infiltrating lymphocytes from mammary carcinomas in female dogs associated with prognostic factors and survival rates. [BMC Cancer. 10: 256.](#)
11. Out, T.A. *et al.* (2002) Local T-cell activation after segmental allergen challenge in the lungs of allergic dogs. [Immunology. 105: 499-508.](#)
12. Pinheiro, D. (2011) Phenotypic and functional characterization of a CD4(+) CD25(high) FOXP3(high) regulatory T-cell population in the dog. [Immunology. 132: 111-22.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet Documentation #10041 available at: <http://www.abdserotec.com/uploads/MSDS/10041.pdf>

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1124F\)](#)

Other formats and applications

This reagent is also available in a [ALEXA FLUOR® 488](#), [ALEXA FLUOR® 647](#), [APC](#), [Pacific Blue®](#), [Purified](#), [RPE](#) format and is useful for Immunohistology - Frozen

For research purposes only, unless otherwise specified in writing by AbD Serotec.

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