

Datasheet: MCA1042F

BATCH NUMBER 159603

Description:	RAT ANTI DOG CD45:FITC
Specificity:	CD45
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	YKIX716.13
Isotype:	IgG2b
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	▪			Neat - 1/5

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 systems with appropriate negative/positive controls.

Target Species	Dog		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (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		
	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen	Canine thymocytes.
RRID	AB_324047
Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line.
Specificity	Rat anti Dog CD45 antibody, clone YKIX716.13 recognizes canine CD45 also known as leukocyte common antigen lustered as Canine CD45 in the First Canine Leukocyte Antigen Workshop (CLAW). Clone YKIX 716.13: immunoprecipitates an antigen of ~180/200 kDa from Con-A blasts (Cobbold et al. 1994). CD45 is expressed on all leukocytes in canine peripheral blood. Rat anti Dog CD45 antibody, clone YKIX716.13 reacts with CD45 on all outbred mongrels and beagles tested and may be against CD45RB isoform.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 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): 137-54. 2. Reis, A.B. et al (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>. Clin Exp Immunol.146: 303-11. 3. Stein, V.M. et al. (2008) Immunophenotypical characterization of monocytes in canine distemper virus infection. Vet Microbiol. 131:237-46. 4. Sanchez, M.A. et al. (2004) Organ-specific immunity in canine visceral leishmaniasis: analysis of symptomatic and asymptomatic dogs naturally infected with <i>Leishmania chagasi</i>. Am J Trop Med Hyg. 70: 618-24. 5. Modiano,J.F. and Helfand,S.C. (2011) Early detection of hemangiosarcoma and angiosarcoma Patent Application No.11/662529 6. Tominaga, M. et al. (2010) Flow cytometric analysis of peripheral blood and tumor-infiltrating regulatory T cells in dogs with oral malignant melanoma. J Vet Diagn Invest. 22: 438-41. 7. Zentek, J. et al. (2002) Morphology and immunopathology of the small and large intestine in dogs with nonspecific dietary sensitivity. J Nutr. 132: 1652S-4S. 8. Hunter, M.J. et al. (2011) Gene therapy of canine leukocyte adhesion deficiency using lentiviral vectors with human CD11b and CD18 promoters driving canine CD18 expression. Mol Ther. 19: 113-21. 9. Comazzi, S. et al. (2006) Flow cytometric patterns in blood from dogs with non-neoplastic and neoplastic hematologic diseases using double labeling for CD18 and CD45. Vet Clin Pathol. 35: 47-54. 10. Giantin, M. et al. (2013) Evaluation of tyrosine-kinase receptor c-KIT (c-KIT) mutations, mRNA and protein expression in canine leukemia: might c-KIT represent a therapeutic target? Vet Immunol Immunopathol. 152: 325-32. 11. Trichler, S.A. et al. (2013) Ultra-pure platelet isolation from canine whole blood. BMC Vet Res. 9: 144. 12. Aresu, L. et al. (2014) VEGF and MMP-9: biomarkers for canine lymphoma. Vet Comp Oncol. 12: 29-36.

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autologous cA-MSCs *in vitro*. [J Vet Sci. 22 \(5\): e63.](#)

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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. 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/MCA1042F 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL:FITC \(MCA6006F\)](#)

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