

Rat anti-Dog CD4 Monoclonal Antibody | anti-CD4 antibody

RAT ANTI DOG CD4: APC

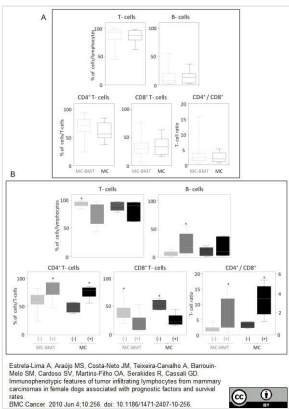
CATALOG # AAA12278	HOST Rat	REACTIVITY Dog	APPLICATIONS Flow Cytometry, Functional Assay
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PRODUCT SYNONYMS

CD4; Monoclonal Antibody; RAT ANTI DOG CD4: APC; CD4 antibody|YKIX302.9; anti-CD4 antibody

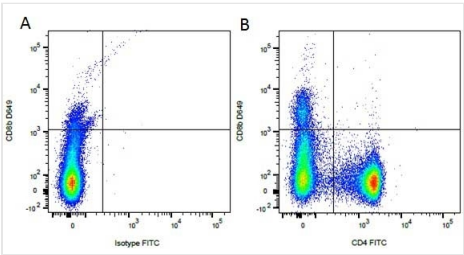
PRODUCT SPECIFICATIONS

Host	Rat
Reactivity	Dog
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	YKIX302.9
Specificity	CD4
Form/Format	Purified IgG conjugated to Allophycocyanin (APC)- lyophilised. Phosphate buffered saline Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Applicable Applications for anti-CD4 antibody	FCM/FACS (Flow Cytometry)
Application Notes	FC/FACS: Min Dilution: Neat; Max Dilution: 1/10 FC/FACS: Use 10ul of the suggested working dilution to label 106 cells or 100ul whole blood. Flow Cytometry: 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.
Immunogen	Canine concanavilin A activated T cell blasts.
Preservative Stabilizers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line
Reconstitution	Reconstitute with 1.0 ml distilled water
Preparation and Storage	Prior to reconstitution store at 4 degree C. Following reconstitution store at 4 degree C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.



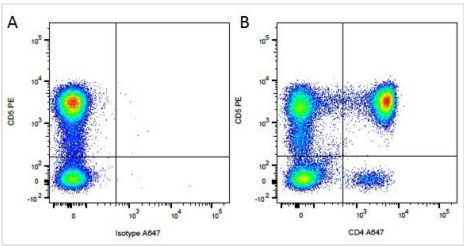
Application Data

Published customer image:RPE conjugated Mouse anti Canine CD4 antibody, clone YKIC302.9used for the assessment of CD4 levels on canine cells by flow cytometry.Image caption:Immunophenotypic profile of tumor infiltrating lymphocyte in canine mammary carcinomas. Analysis of tumor infiltrating T-cells, B-lymphocytes and T-cell subsets from MC-BMT or MC (A), further subcategorized according to the absence (-) or presence (+) of lymph node metastasis (-) (B). Lymphocyte populations and subsets were identified by flow cytometric immunostaining as described in Material and Methods. Data were expressed as percentage of positive cells within gated lymphocytes and CD4+/CD8+ T-cell ratio. Significant differences at p < 0.05 are highlighted by asterisk.



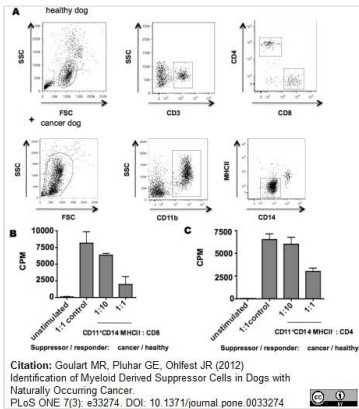
Application Data

Figure A. Purified Mouse anti Canine CD8b detected with Goat anti Mouse IgG1 DyLight 649 and Rat IgG2b FITC isotype control . Figure B. Purified Mouse anti Canine CD8b detected with Goat anti Mouse IgG1 PE and Rat anti Canine CD4 FITC . All experiments performed on red cell lysed canine blood gated on mononuclear cells.



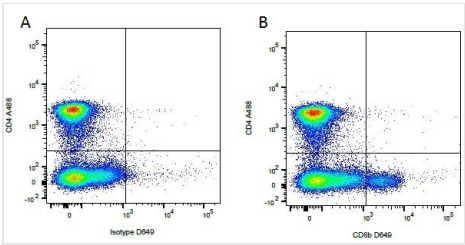
Application Data

Figure A. RPE conjugated Mouse anti Canine CD5 and A647 conjugated Rat IgG2a isotype control . Figure B. RPE conjugated Rat anti Canine CD5 and A647 conjugated Rat anti Canine CD4 . All experiments performed on red cell lysed canine blood gated on mononuclear cells.



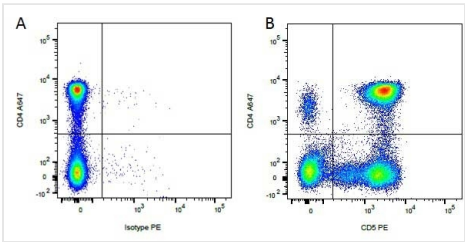
Application Data

Published customer image:Pacific Blue conjugated Mouse anti Canine CD4 antibody, clone YKIX302.9 used for evaluation of CD4 expression on canine cells by flow cytometry.Image caption:CD11b+CD14-MHCII- cells suppress T cell proliferation.Facs sorted CD11b+CD14-MHCII- cells isolated from a dog with osteosarcoma or healthy PBMCs were co-incubated with mitogen-stimulated CD4+ and CD8+ T cells isolated from a healthy dog for 72 hrs. No stimulated cells were used as negative control. Proliferative responses were measured by 3H-thymidine incorporation from experiments performed in triplicate. CPM, counts per minute. Mean +/- SEM are shown.From: Goulart MR, Pluhar GE, Ohlfest JR (2012)Identification of Myeloid Derived Suppressor Cells in Dogs with Naturally Occurring Cancer.



Application Data

Figure A. A488 conjugated Rat anti Canine CD4 and purified Mouse IgG1 isotype control detected with Goat anti Mouse IgG1 DyLight 649 . Figure B. A488 conjugated Rat anti Canine CD4 and purified Mouse anti Canine CD8b detected with Goat anti Mouse IgG1 DyLight 649 . All experiments performed on red cell lysed canine blood gated on mononuclear cells.



Application Data

Figure A. A647 conjugated Rat anti Canine CD4 and RPE conjugated Rat IgG2a isotype control . Figure B. A647 conjugated Rat anti Canine CD4 and RPE conjugated Rat anti Canine CD5 . All experiments performed on red cell lysed canine blood gated on mononuclear cells.

ADDITIONAL INFORMATION

Related Product Information for anti-CD4 antibody	Rat 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 in vivo, but alone is not sufficient to prolong allograft survival in a canine transplant model (Watson et al. 1993). Uniquely amongst mammals, canine CD4 is expressed by neutrophils as well as by lymphocyte subsets (Moore et al. 1992).
References	1. Schaut, R.G. et al. (2016) Recovery of antigen-specific T cell responses from dogs infected with Leishmania (L.) infantum by use of vaccine associated TLR-agonist adjuvant.Vaccine. 34 (44): 5225-34. 2. Gorman, S.D. et al. (1994) Isolation and expression of cDNA encoding the canine CD4 and CD8 alpha antigens.Tissue Antigens. 43 (3): 184-8. 3. Watson, C.J. et al. (1993) CD4 and CD8 monoclonal antibody therapy: strategies to prolong renal allograft survival in the dog.Br J Surg. 80 (11): 1389-92. 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 (2): 137-43. 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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/monoclonal/cd4-antibody-clone-ykix302-9-flow-cytometry-elisa/12278>