



Anti Porcine CD4AB

Background

CD4 is a glycoprotein expressed on the surface of immature T-cells in the thymus, helper T-cells and antigen presenting cells. CD4 is known to function as a co-receptor of T-cell receptor when T-cells recognizes the peptide antigen presented by MHC class II molecules on antigen presenting cells. CD4 polymorphisms were reported in many mammal species including various porcine strains. This antibody (clone x1E10) is the only monoclonal antibody available to recognize both of porcine CD4.A and CD4.B subtypes, which allows researchers to detect porcine CD4 irrespective of subtypes.

Product type	Primary Antibody
Immunogen	Porcine CD4
Raised in	Mouse
Myeloma	PX63-U1
Clone number	x 1E10
Isotype	IgG2a kappa
Purification	-----
Buffer	Phosphate buffer saline containing 50% glycerol
Concentration	1 mg/mL
Volume	100 uL
Label	Unlabeled
Specificity	Porcine CD4 (does not react with human, mouse and marmoset CD4)
Storage	Store below -20°C *Aliquot to avoid cycle of freeze/thaw
Reference	1. Matsubara T, Nishii N, Takashima S, Takasu M, Imaeda N, Aiki-Oshimo K, Yamazoe K, Kametani Y, Ando A, Kitagawa H, et al. Identification of a CD4 variant in Microminipigs not detectable with available anti-CD4 monoclonal antibodies. <i>Veterinary Immunology Immunopathology</i> . 168 (2015) 176-183

Recommended Dilutions	Flowcytometry (1:10), Immunohistochemistry (1:10) Other applications have not been tested or not reactive. Optimal dilutions/concentrations should be determined by the end user.
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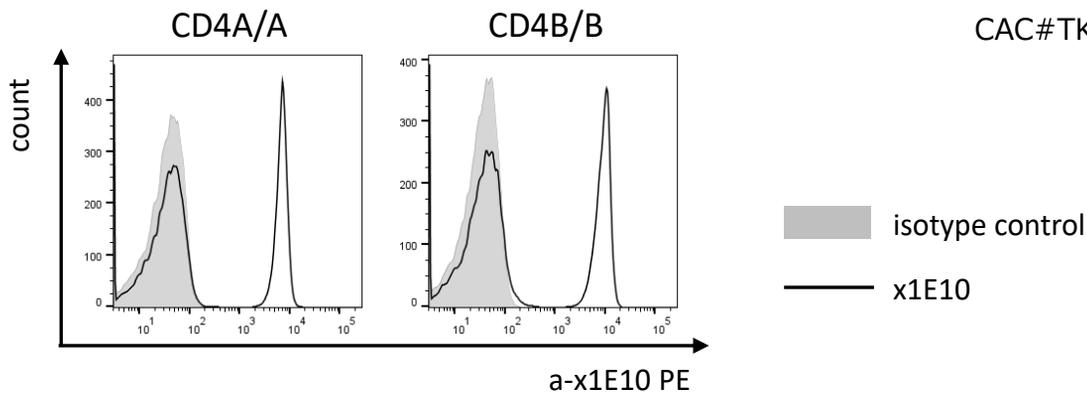


Fig 1. Flowcytometry

1 μ L of x1E10 (0.1mg/mL) was added to 40 μ L of cell suspension (usually 1x10⁶ cells) in Fisher tube and incubated for 15min at 4 $^{\circ}$ C. After washing the cells with PBS, secondary antibody (anti-mouse IgG2a FITC) diluted to suitable concentration was added and incubated for 15min at 4 $^{\circ}$ C in a dark place. After washing the cells with PBS, cells were analyzed by flowcytometry. Lymphocytes were gated and analyzed by FowjoTM. Human, common marmoset, mouse, and CD4A/A swine PBMCs are not reactive with x1E10.

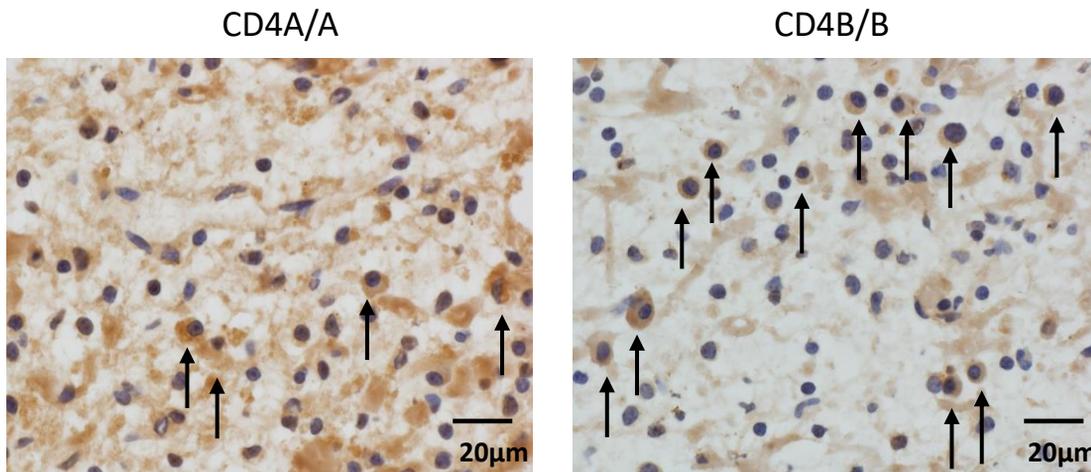


Fig 2. Immunohistochemistry

CD4A/A and CD4B/B swine spleen section was stained by immunohistochemistry. 50 μ L of x1E10(0.1mg/mL) was added to each slide and incubated overnight at 4 $^{\circ}$ C. After washing the cells with PBS, secondary antibody (anti-mouse IgG-HRP) diluted to a suitable concentration was added and incubated for 1hr at room temperature, following DAB staining. Nuclei are stained with Haematoxylin. A part of mononuclear cells were stained in both CD4A and CD4B sections.

For research use only, Not for diagnostic use.



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