ARG23370
anti-CD45 antibody [K252.1E4] (FITC)

Package: 50 tests
Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [K252.1E4] recognizes CD45 Mouse anti Pig CD45, clone K252.1E4 recognizes an epitope common to all porcine CD45 isoforms (Schnitzlein et al. 1998). CD45 is also known as leukocyte common antigen (LCA).Mouse anti Pig CD45, clone K252.1E4 immunoprecipitates three polypeptides of 226, 210 and 190 kDa from preparations of porcine peripheral blood mononuclear cells and shows a broad reactivity pattern with both lymphoid and myeloid cells (Zuckermann et al. 1994).
Tested Reactivity	Pig
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	K252.1E4
Isotype	IgG1
Target Name	CD45
Species	Pig
Immunogen	Porcine Peripheral Blood lymphocytes.
Conjugation	FITC
Alternate Names	LY5; GP180; Receptor-type tyrosine-protein phosphatase C; CD45; L-CA; CD antigen CD45; Leukocyte common antigen; CD45R; LCA; T200; EC 3.1.3.48; B220

Application Instructions

Application table

Application	Dilution
FACS	Neat

Application Note: FACS: Use 10 µl of the suggested working dilution to label 10^6 cells in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

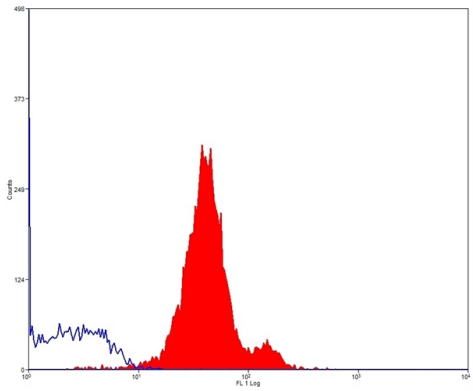
Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.09% Sodium azide and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	1% BSA
Concentration	0.1 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

	repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

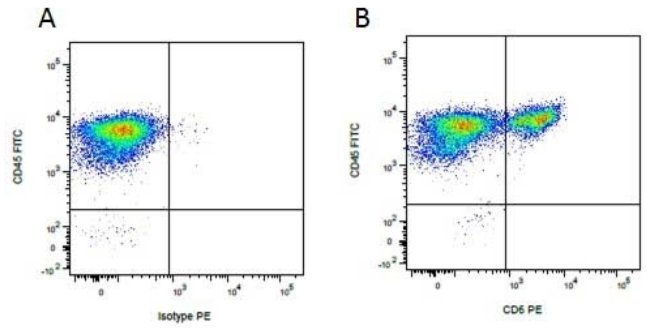
Gene Symbol	PTPRC
Gene Full Name	protein tyrosine phosphatase, receptor type, C
Background	CD45 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. This PTP has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq, Jun 2012]
Function	CD45: Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor. Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby modulates LYN activity. (Microbial infection) Acts as a receptor for human cytomegalovirus protein UL11 and mediates binding of UL11 to T-cells, leading to reduced induction of tyrosine phosphorylation of multiple signaling proteins upon T-cell receptor stimulation and impaired T-cell proliferation. [UniProt]
Research Area	Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling Transduction antibody; Mouse Inflammatory Cell Marker antibody; B Cell Marker antibody
Calculated Mw	147 kDa
PTM	Heavily N- and O-glycosylated. [UniProt]

Images



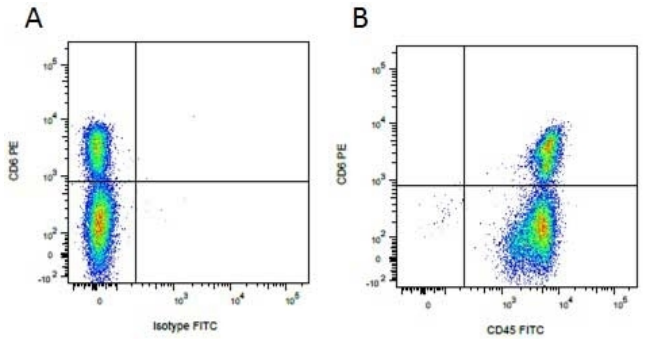
ARG23370 anti-CD45 antibody [K252.1E4] (FITC) FACS image

Flow Cytometry: Pig peripheral blood lymphocytes stained with ARG23370 anti-CD45 antibody [K252.1E4] (FITC).



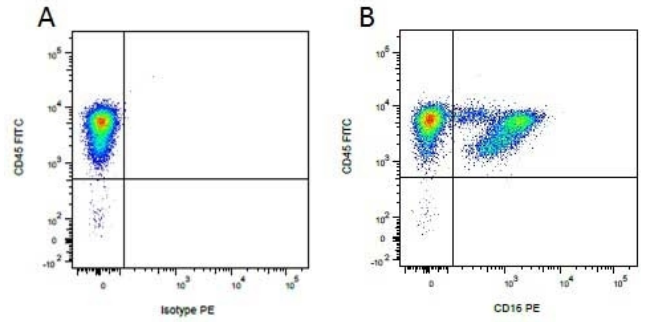
ARG23370 anti-CD45 antibody [K252.1E4] (FITC) FACS image

Flow Cytometry: Figure A. ARG23370 anti-CD45 antibody [K252.1E4] (FITC) and purified Mouse IgG2a isotype control detected with Goat anti Mouse IgG2a (PE). Figure B. ARG23370 anti-CD45 antibody [K252.1E4] (FITC) and purified Mouse anti Porcine CD6 detected with Goat anti Mouse IgG2a (PE). All experiments performed on red cell lysed Porcine blood gated on mononuclear cells.



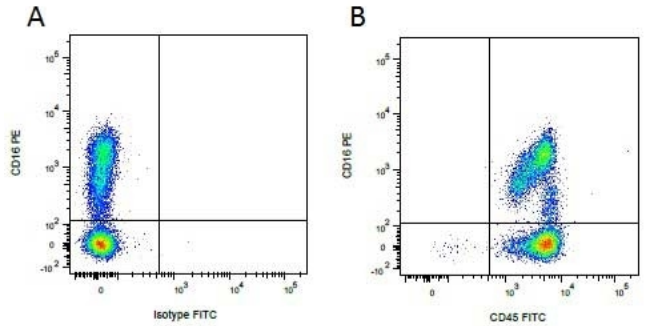
ARG23370 anti-CD45 antibody [K252.1E4] (FITC) FACS image

Flow Cytometry: Figure A. Purified Mouse anti Porcine CD6 detected with Goat anti Mouse IgG2a (PE) and Mouse IgG2b FITC isotype control. Figure B. Purified Mouse anti Porcine CD6 detected with Goat anti Mouse IgG2a (PE) and ARG23370 anti-CD45 antibody [K252.1E4] (FITC). All experiments performed on red cell lysed Porcine blood gated on mononuclear cells.



ARG23370 anti-CD45 antibody [K252.1E4] (FITC) FACS image

Flow Cytometry: Figure A. ARG23370 anti-CD45 antibody [K252.1E4] (FITC) and Mouse IgG1 isotype control (PE). Figure B. ARG23370 anti-CD45 antibody [K252.1E4] (FITC) and Mouse anti Porcine CD16 (PE). All experiments performed on red cell lysed Porcine blood gated on mononuclear cells.



ARG23370 anti-CD45 antibody [K252.1E4] (FITC) FACS image

Flow Cytometry: Figure A. PE conjugated Mouse anti Porcine CD16 and FITC conjugated Mouse IgG1 isotype control. Figure B. PE conjugated Mouse anti Porcine CD16 and ARG23370 anti-CD45 antibody [K252.1E4] (FITC). All experiments performed on red cell lysed Porcine blood gated on mononuclear cells.