ARG65846
anti-CD45RA / RB antibody [MRC OX-33] (FITC)

Package: 100 µl
Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [MRC OX-33] recognizes CD45RA / RB
Tested Reactivity	Rat
Tested Application	FACS
Specificity	The rat CD45 antigen (Leukocyte Common Antigen (L-CA)) has been shown to exist in different forms on different lymphoid cell types. CD45 on Thymocytes shows one main band at 180 kDa, T cells show 4 bands at 180, 190, 200 and 220 kDa. It detects a subfraction of the 240 kDa rat CD45 band found only on B lymphocytes.
Host	Mouse
Clonality	Monoclonal
Clone	MRC OX-33
Isotype	IgG1
Target Name	CD45RA / RB
Species	Rat
Immunogen	Rat CD45RA / RB
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	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified.
Buffer	PBS (pH 7.2), 0.09% Sodium azide and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	1% BSA
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

Database links	GeneID: 24699 Rat Swiss-port # P04157 Rat
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	CD45 on Thymocytes shows one main band at 180 kDa, T cells show 4 bands at 180, 190, 200 and 220 kDa. It detects a subfraction of the 240 kDa rat CD45 band found only on B lymphocytes.
PTM	Heavily N- and O-glycosylated.