

ARG62867 anti-CD45RB antibody [MEM-55] (FITC)

Package: 100 tests
Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [MEM-55] recognizes CD45RB
Tested Reactivity	Hu, NHuPrm
Tested Application	FACS
Specificity	The clone MEM-55 recognizes a sialidase-sensitive epitope of CD45RB, a 180-240 kDa single chain type I membrane glycoprotein, variant of CD45 (CD45RB isoform). CD45RB is expressed on a subset of T lymphocytes, B lymphocytes, monocytes, macrophages, granulocytes and dendritic cells. HLDA III; WS Code NL 358 HLDA IV; WS Code NL 2 HLDA V; WS Code T T-151 HLDA V; WS Code T T-CD45.08
Host	Mouse
Clonality	Monoclonal
Clone	MEM-55
Isotype	IgG1
Target Name	CD45RB
Species	Human
Immunogen	Human thymocytes and T 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	20 µl / 10 ⁶ cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free 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: 5788 Human](#)

[Swiss-port # P08575 Human](#)

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.

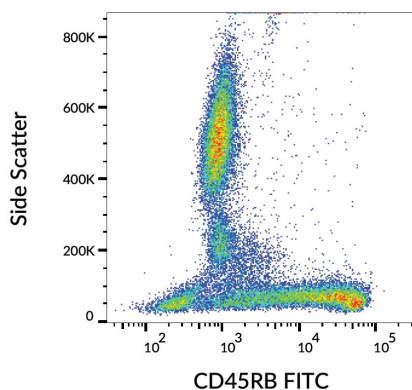
(Microbial infection) Acts as a receptor for human cytomegalovirus protein UL11 and mediates binding of UL11 to T-cells, leading to reduced induction of tyrosine phosphorylation of multiple signaling proteins upon T-cell receptor stimulation and impaired T-cell proliferation. [UniProt]

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.

Images



ARG62867 anti-CD45RB antibody [MEM-55] (FITC) FACS image

Flow Cytometry: Human peripheral blood stained with ARG62867 anti-CD45RB antibody [MEM-55] (FITC).