

## ARG54278 anti-CD45RA antibody [MEM-56] (PE)

Package: 50 tests  
Store at: 4°C

### Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [MEM-56] recognizes CD45RA
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone MEM-56 reacts with CD45RA, a 205-220 kDa single chain type I glycoprotein, variant of CD45 (CD45RA isoform). CD45RA is expressed on most of B lymphocytes, resting and native T lymphocytes, medullar thymocytes and monocytes. HLDA IV; WS Code NL 907
Host	Mouse
Clonality	Monoclonal
Clone	MEM-56
Isotype	IgG2b
Target Name	CD45RA
Species	Human
Immunogen	Human thymocytes and T lymphocytes.
Conjugation	PE
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 <sup>6</sup> 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 R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography 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

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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.