

## Product datasheet

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# ARG62865 anti-CD45RB antibody [MEM-55]

Package: 100 μg Store at: -20°C

#### **Summary**

Isotype

**Species** 

Product Description Mouse Monoclonal antibody [MEM-55] recognizes CD45RB

Tested Reactivity Hu, NHuPrm

Tested Application CyTOF®-candidate, FACS, ICC/IF, IHC-P, IP, WB

Specificity The clone MEM-55 recognizes a siliadase-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

Clone MEM-55

Target Name CD45RB

Immunogen Human thymocytes and T lymphocytes.

lgG1

Human

Conjugation Un-conjugated

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
	CyTOF®-candidate	Assay-dependent
	FACS	2 μg/ml
	ICC/IF	1:100
	IHC-P	Assay-dependent
	IP	Assay-dependent
	WB	Assay-dependent
Application Note	IHC-P: No pre-treatment of tissue sections is essential.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

**Purification** Purified from ascites by protein-A affinity chromatography.

Purity > 95% (by SDS-PAGE)

Buffer PBS (pH 7.4) and 15 mM Sodium azide

Preservative 15 mM Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. 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 <u>GeneID: 5788 Human</u>

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]

Highlight Related products:

<u>CD45RB antibodies</u>; <u>Anti-Mouse IgG secondary antibodies</u>;

Related news:

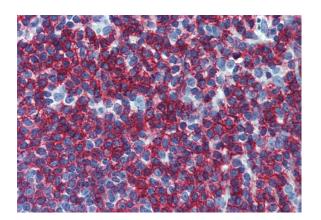
CyTOF-candidate Antibodies

Research Area Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling

Transduction antibody; Mouse Inflammatory Cell Marker antibody; B Cell Marker antibody

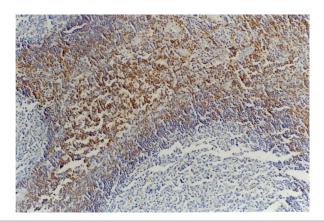
Calculated Mw 147 kDa

PTM Heavily N- and O-glycosylated.



### ARG62865 anti-CD45RB antibody [MEM-55] IHC-P image

Immunohistochemistry: Paraffin-embedded Human small intestine tissue stained with ARG62865 anti-CD45RB antibody [MEM-55].



### ARG62865 anti-CD45RB antibody [MEM-55] IHC-P image

Immunohistochemistry: Tonsil (paraffin-embedded sections) stained with ARG62865 anti-CD45RB antibody [MEM-55].