

## Product datasheet

info@arigobio.com

# ARG53856 anti-CD45 antibody [MEM-28] (PerCP)

Package: 100 tests Store at: 4°C

## **Summary**

Product Description PerCP-conjugated Mouse Monoclonal antibody [MEM-28] recognizes CD45

Tested Reactivity Hu

Species Does Not React With Hrs

Tested Application FACS

Specificity The clone MEM-28 reacts with all alternative forms of human CD45 antigen (Leukocyte Common

Antigen), a 180-220 kDa single chain type I transmembrane protein expressed at high level on all cells

of hematopoietic origin, except erythrocytes and platelets.

HLDA III; WS Code NL 833a

Host Mouse

Clonality Monoclonal
Clone MEM-28

Isotype IgG1
Target Name CD45

Species Human

Immunogen Human thymocytes and T lymphocytes.

Conjugation PerCP

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	10 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 Peridinin-chlorophyll-protein complex (PerCP) 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

Background

Database links <u>GeneID: 5788 Human</u>

Swiss-port # P08575 Human

Gene Symbol PTPRC

Gene Full Name protein tyrosine phosphatase, receptor type, C

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 Pafface Ivia 2012]

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]

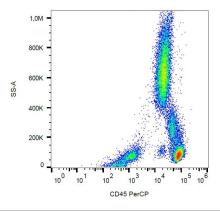
Research Area Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling

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

Calculated Mw 147 kDa

PTM Heavily N- and O-glycosylated.

#### **Images**



#### ARG53856 anti-CD45 antibody [MEM-28] (PerCP) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG53856 anti-CD45 antibody [MEM-28] (PerCP).