

## ARG53857 anti-CD45 antibody [EM-05] (APC)

Package: 100 µg  
Store at: 4°C

### Summary

Product Description	APC-conjugated Rat Monoclonal antibody [EM-05] recognizes CD45
Tested Reactivity	Ms
Tested Application	FACS
Specificity	The clone EM-05 reacts with mouse CD45 antigen (Leukocyte Common Antigen), a single chain type I transmembrane protein expressed at high level on cells of hematopoietic origin, except erythrocytes and platelets.
Host	Rat
Clonality	Monoclonal
Clone	EM-05
Isotype	IgG
Target Name	CD45
Species	Mouse
Immunogen	Murine peripheral blood leukocytes_x000D_
Conjugation	APC
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	1 - 2 µg/ml
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 cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	0.5 mg/ml
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.

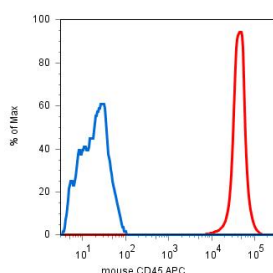
## Bioinformation

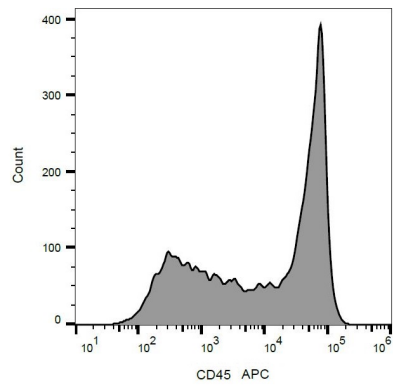
Database links	<a href="#">GeneID: 19264 Mouse</a>
Background	CD45 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP 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	<p>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.</p> <p>(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]</p>
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

### ARG53857 anti-CD45 antibody [EM-05] (APC) FACS image

Flow Cytometry: Mouse blood lymphocytes stained with ARG53857 anti-CD45 antibody [EM-05] (APC).





#### ARG53857 anti-CD45 antibody [EM-05] (APC) FACS image

Flow Cytometry: Mouse splenocytes stained with ARG53857 anti-CD45 antibody [EM-05] (APC).