Datasheet for ABIN343733

anti-CD45 antibody (PerCP)

3 Images

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Overview

Quantity:	100 µg
Target:	CD45 (PTPRC)
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This CD45 antibody is conjugated to PerCP
Application:	Flow Cytometry (FACS)

Product Details

Purpose:	Anti-Ms CD45 PerCP
Immunogen:	Murine peripheral blood leukocytes
Clone:	EM-05
Isotype:	IgG
Specificity:	The rat monoclonal antibody EM-05 reacts with an extracellular epitope of murine 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.
Cross-Reactivity (Details):	Mouse
Purification:	Purified antibody is conjugated with activated Peridinin-Chlorophyll Protein (PerCP) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	CD45 (PTPRC)
Alternative Name:	CD45 (PTPRC Products)
Background:	Protein tyrosine phosphatase, receptor type, C,CD45 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10 % of all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing, these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis.,LCA, T200, LY5, GP180, TPC
Gene ID:	19264
UniProt:	Q8C6Q7
Pathways:	TCR Signaling, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, CXCR4-mediated Signaling Events, BCR Signaling

Application Details

Application Notes:	Flow cytometry: Recommended dilution: 2-4 µg/mL, positive control: murine peripheral blood leukocytes.
Restrictions:	For Research Use only

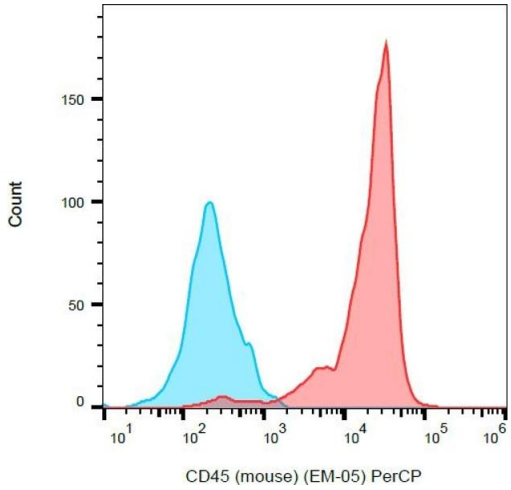
Handling

Concentration:	0.5 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

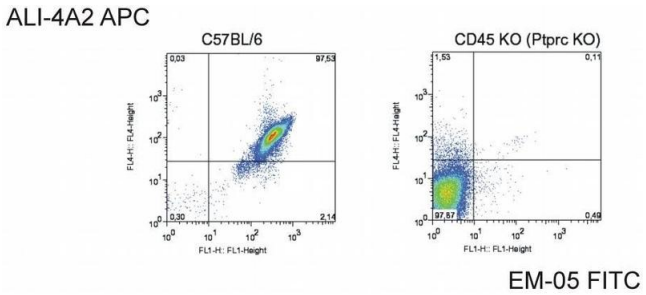
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Images



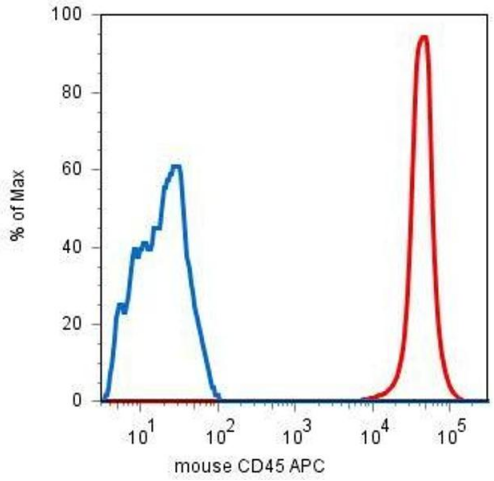
Flow Cytometry

Image 1. Separation of murine splenocytes stained using anti-mouse CD45 (EM-05) PerCP antibody (concentration in sample 1 µg/mL, red) from unstained murine splenocytes (blue) in flow cytometry analysis (surface staining).



Flow Cytometry

Image 2. Surface staining of C57BL/6 cells and CD45 knock-out cells with anti-CD45 antibodies EM-05 and ALI-4A2.



Flow Cytometry

Image 3. Surface staining of mouse blood lymphocytes with anti-CD45 antibody -APC.