

Anti-Ms CD45 Purified Ptprc Monoclonal Antibody

Catalog Number: M00555-4

Introduction

The clone MYG13 recognizes CD22 cell surface antigen, a 130-140kDa protein. The expression of CD22 is primarily restricted to the normal and neoplastic B cells but does not express on other hematopoietic cells. The initiation of expression of CD22 starts in the cytoplasm of pro-B and pre-B cells. Although CD22 is not expressed by plasma cells, it is abundantly expressed by the follicular mantle and marginal zone B-cells. Being a member of the immunoglobulin superfamily, CD22 serves as an adhesion receptor for sialic acid-bearing ligands expressed on erythrocytes and leukocytes. The role of CD22 in the activation of B-cells is primarily associated with tyrosine kinases mediated signal transduction pathways.

This antibody is routinely tested by flow cytometric analysis. Flow cytometry and other applications were tested during antibody development by CapricoBio or are reported in the literature.

Application Information

Each lot of this antibody has been pre-titrated and tested by flow cytometric analysis of human PBMCs such that 5ul of this product is sufficient for staining of 1 million cells in a 100ul staining volume or 100ul of whole blood. It is recommended that antibody reactivity be empirically titrated for optimal performance in the application of interest.

About Ptprc

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.

Overview

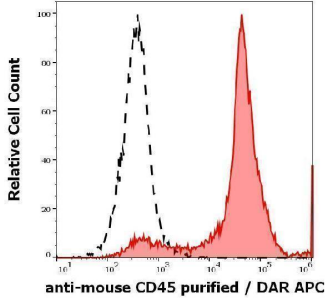
Product Name	Anti-Ms CD45 Purified Ptprc Monoclonal Antibody
Reactive Species	Mouse
Description	Boster Bio Anti-Ms CD45 Purified Ptprc Monoclonal Antibody (Catalog# M00555-4). Tested in Flow Cytometry, IP, WB, ICC application(s). This antibody reacts with Mouse.
Conjugate	APC
Application	Flow Cytometry, IP, ICC, WB
Clonality	Monoclonal EM-05
Formulation	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide

Storage Instructions	Store at 2-8°C. Do not freeze.
Host	Rat
Uniprot ID	Q8C6Q7

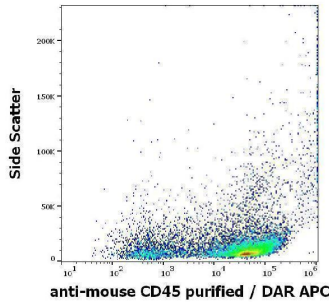
Technical Details

Immunogen	Murine peripheral blood leukocytes. 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.
Predicted Reactive Species	Bovine
Isotype	Rat IgG
Form	Liquid
Concentration	1 mg/ml
Purification	Purified by protein-A affinity chromatography.
Suggested Dilutions	Flow cytometry: 2 ug/ml; positive control: murine peripheral blood leukocytes.

Anti-Ms CD45 Purified Ptprc Monoclonal Antibody (M00555-4) Images



Separation of murine splenocytes stained using anti-mouse CD45 (EM-05) purified antibody (concentration in sample 1.67 $\mu\text{g/ml}$, DAR APC, red-filled) from murine splenocytes unstained by primary antibody (DAR APC, black-dashed) in flow cytometry analysis (surface staining) of murine splenocyte suspension.



Flow cytometry surface staining pattern of murine splenocytes stained using anti-mouse CD45 (EM-05) purified antibody (concentration in sample 1.67 $\mu\text{g/ml}$, DAR APC).

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