

Anti-Hu CD45 Purified PTPRC Monoclonal Antibody

Catalog Number: M00555-3

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-Hu CD45 Purified PTPRC Monoclonal Antibody
Reactive Species	Human
Description	Boster Bio Anti-Hu CD45 Purified PTPRC Monoclonal Antibody (Catalog# M00555-3). Tested in Flow Cytometry, IP, WB, IHC-P, ICC application(s). This antibody reacts with Human.
Application	Flow Cytometry, IP, IHC-P, ICC, WB
Clonality	Monoclonal MEM-28
Formulation	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage Instructions	Store at 2-8°C. Do not freeze.
Host	Mouse
Uniprot ID	P08575

Technical Details

Immunogen	Human thymocytes and T lymphocytes. The antibody MEM-28 reacts with an extracellular epitope on 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.
Predicted Reactive Species	Primate
Isotype	Mouse IgG1
Form	Liquid
Concentration	1 mg/ml

Purification	Purified by protein-A affinity chromatography.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunohistochemistry (paraffin sections): No pre-treatment of tissue sections is needed.</p> <p>Immunocytochemistry: Recommended dilution: 10 ug/ml; paraformaldehyde fixation can be used.</p> <p>Western blotting: non-reducing conditions; recommended dilution: 1 ug/ml; 6-7% gel recommended (band around 180-250 kDa).</p> <p>Flow cytometry: Recommended dilution: 1 ug/ml.</p>

Anti-Hu CD45 Purified PTPRC Monoclonal Antibody (M00555-3) Images

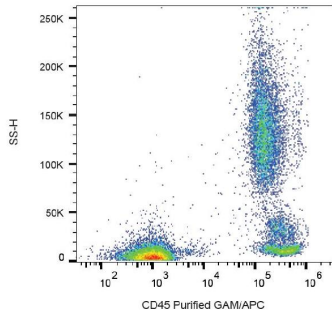


Figure 3. Flow Cytometry validation of PTPRC using Anti-Hu CD45 Purified PTPRC Monoclonal Antibody (M00555-3).

Flow cytometry analysis (surface staining) of human peripheral blood cells with anti-human CD45 (MEM-28) purified

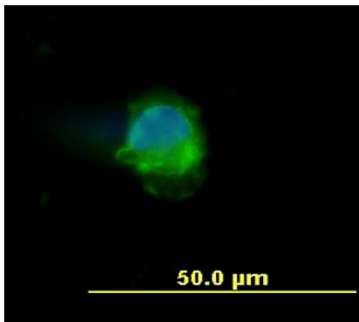


Figure 1. Immunocytochemistry staining of PTPRC using Anti-Hu CD45 Purified PTPRC Monoclonal Antibody (M00555-3).

Immunocytochemistry staining of human peripheral blood mononuclear cell using anti-human CD45 (MEM-28)

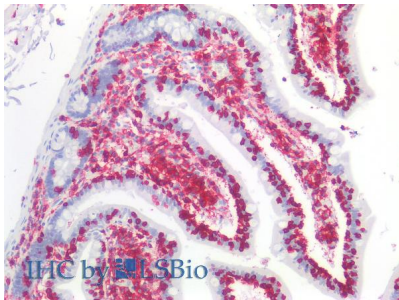


Figure 2. Immunohistochemistry validation of PTPRC using Anti-Hu CD45 Purified PTPRC Monoclonal Antibody (M00555-3).

Immunohistochemistry staining of human small intestine (paraffin-embedded sections) with anti-CD45 (MEM-28)

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