FITC Mouse Anti-Human CD45

Product Information

Material Number: 555482
Alternate Name: PTPRC; LCA; Leukocyte Common Antigen; T200; GP180; LY5
Size: 100 Tests
Vol. per Test: 20 µl
Clone: HI30
Immunogen: Human Peripheral Blood Leucocytes
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Workshop: IV N816
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The HI30 monoclonal antibody specifically binds to the 180, 190, 205, 220 kDa protein isoforms of CD45. CD45 is encoded by the PTPRC (Protein tyrosine phosphatase receptor type C) gene. CD45, also known as the leukocyte common antigen (LCA), is a member of the protein tyrosine phosphatase (PTP) family. It is present on all human leukocytes including lymphocytes, monocytes, granulocytes, eosinophils, and thymocytes. CD45 is absent from circulating erythrocytes, platelets, or mature erythroid cells of bone marrow and non-hemopoietic tissues.

Flow cytometric analysis of CD45 expression on human peripheral blood lymphocytes. Human whole blood was stained with either FITC Mouse IgG1, κ Isotype Control (Cat. No. 555748; dashed line histogram) or FITC Mouse Anti-Human CD45 antibody (Cat. No. 555482/560976/561865; solid line histogram). The erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of intact lymphocytes.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

<table>
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<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<td>100 Tests</td>
<td>MOPC-21</td>
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<td>Lysing Buffer</td>
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<td>BD FACSTM Lysing Solution</td>
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<td>FITC Mouse Anti-Human CD45</td>
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<td>561865</td>
<td>FITC Mouse Anti-Human CD45</td>
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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).

2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

3. An isotype control should be used at the same concentration as the antibody of interest.

4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.


References


Terry LA, Brown MH, Beverley PC. The monoclonal antibody, UCHL1, recognizes a 180,000 MW component of the human leucocyte-common antigen, CD45. Immunology. 1988; 64(2):331-336. (Biology)
