Technical Data Sheet

PE Mouse Anti-Human CD4

Product Information

Material Number: 550630
Alternate Name: L3T4; T-cell surface antigen T4/Leu-3; W3/25; CD4 antigen (p55)
Size: 50 Tests
Vol. per Test: 20 µl
Clone: L200
Immunogen: Human HPB-ALL Cell Line
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity:
QC Testing: Rhesus, Cynomolgus, Baboon
Tested in Development: Human

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The L200 monoclonal antibody specifically binds to the human form of the 56 kDa transmembrane glycoprotein, CD4, which is present on the T-helper/inducer subset of normal human donor peripheral blood lymphocytes. The L200 antibody also cross-reacts with a subset of CD3-positive peripheral blood lymphocytes, but not monocytes, of both Rhesus and Cynomolgus Macaque monkeys. Cross-reactivity on both lymphocytes and monocytes (weak) from baboons is also observed. CD4 distribution on lymphocytes is similar for both human and monkey cells, with the majority of CD4-positive lymphocytes being CD8-negative and lacking reactivity with antibodies to B- or NK-cell markers.

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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry Routinely Tested

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
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<tbody>
<tr>
<td>556650</td>
<td>PE Mouse IgG1, κ Isotype Control</td>
<td>50 Tests</td>
<td>MOPC-21</td>
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<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
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<tr>
<td>555899</td>
<td>Lysing Buffer</td>
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</table>

Flow cytometric analysis of CD4 on Rhesus macaque (Macaca mulatta) peripheral blood lymphocytes. Whole blood was stained with either PE Mouse Anti-Human CD4 (Cat. No. 550630; solid line histogram) or PE Mouse IgG1, κ Isotype Control (Cat. No. 556650; dashed line histogram). Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Fluorescence histograms depicting CD4 (or Ig isotype control) expression were derived from gated events with the side and forward light-scattering characteristics of viable lymphocytes.
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. An isotype control should be used at the same concentration as the antibody of interest.

3. 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.

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

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

6. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.


References


Verdier F, Aujualat M, Condevaux F, Descotes J. Determination of lymphocyte subsets and cytokine levels in cynomolgus monkeys. Toxicology. 1995; 105(1):81-90. (Biology)