PerCP-Cy™5.5 Mouse Anti-Human CD2

Product Information

Material Number: 560643
Alternate Name: LFA-2; Lymphocyte function antigen-2; T11/Leu-5; Rosette receptor
Size: 50 Tests
Vol. per Test: 5 µl
Clone: RPA-2.10
Immunogen: Human Phytohemagglutinin-treated Lymphoblasts
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: Tested in Development: Rhesus, Cynomolgus, Baboon
Workshop: IV T085
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The RPA-2.10 monoclonal antibody specifically binds to CD2. CD2 is a 50 kDa single-chain transmembrane glycoprotein, also known as LFA-2 or the receptor for sheep erythrocytes. CD2 belongs to the immunoglobulin superfamily of proteins along with its ligand LFA-3, CD58. It is present on about 80-90% of human peripheral blood lymphocytes, greater than 95% of thymocytes, all T lymphocytes that form E-rosettes and a subset of NK cells. CD2 plays a role in T-cell signaling and in lymphocyte adhesion.

Fluorescence emission was measured on a BD™ LSR II flow cytometry system.

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 PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

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>
</thead>
<tbody>
<tr>
<td>550795</td>
<td>PerCP-Cy™5.5 Mouse IgG1 κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</td>
</tr>
<tr>
<td>555899</td>
<td>Lysing Buffer</td>
<td>100 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
<td>100 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
</tbody>
</table>

Flow cytometric analysis of CD2 on human lysed whole blood. Human lysed whole blood was stained with the PerCP-Cy™5.5 Mouse Anti-Human CD2 antibody (Cat. No. 560643; shaded histogram) or with a PerCP-Cy™5.5 Mouse IgG1, κ isotype control (Cat. No. 550795; unshaded histogram). Erythrocytes were lysed with BD FACSTM Lysing Solution (Cat. No. 349202). Histograms were derived from gated events based on light scattering characteristics for lymphocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry system.
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
6. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
7. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
9. Cy is a trademark of GE Healthcare.
10. 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