PE Rat Anti-Mouse CD93 (Early B Lineage)

Product Information

Material Number: 558039
Alternate Name: AA4; Cd93; C1qRp; C1qr1; Ly-68; Ly68; C1q/MBL/SPA receptor
Size: 0.1 mg
Concentration: 0.2 mg/ml
Clone: AA4.1
Immunogen: Pre-B lymphoma 70Z/3, derived from (C57BL/6 x DBA/2)F1 mouse
Isotype: Rat (SD) IgG2b, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The AA4.1 monoclonal antibody specifically recognizes the Early B Lineage antigen which is also known as CD93, AA4 antigen, Ly-68, and Complement component C1q receptor (C1qRp). This 130-140-kDa type I transmembrane glycoprotein is expressed on immature B lymphocytes in the adult bone marrow and on hematopoietic progenitors and stem cells in adult bone marrow, fetal liver, and embryonic yolk sac. Although CD93+ cells are most plentiful in adult mouse bone marrow, a smaller number of CD93+ cells which express lower CD93 levels can be detected in the adult spleen using bright fluorescent conjugates of the AA4.1 antibody or an amplified indirect immunofluorescent staining procedure. It has been observed that the staining pattern of the 493 monoclonal antibody is similar to that of the AA4.1 antibody, in that both antibodies precipitate molecules of the same molecular weight. Staining with the AA4.1 antibody is not blocked by the 493 antibody. These results suggest that the antibodies recognize separate epitopes on the same Early B Lineage antigen.

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.

The expression of CD93 (Early B Lineage) antigen on developing and peripheral B lymphocytes. BALB/c bone marrow cells (top panels) and splenocytes (bottom panels) were stained with FITC Rat Anti-Mouse CD45R/B220 (Cat. No. 553087) and either PE Rat IgG2b, κ Isotype Control (Cat. No. 553989; left panels) or PE Rat Anti-Mouse CD93 (Early B Lineage) (Cat. No. 558039; right panels). Viable cells were selected by exclusion of propidium iodide, and flow cytometry was performed on a BD FACSCalibur™ flow cytometry system.

BD Biosciences

bdbiosciences.com

United States Canada Europe Japan Asia Pacific Latin America/Caribbean
877.232.0995 866.979.9408 32.2.400.98.95 0120.8555.90 65.6861.0633 55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

© 2017 BD. BD, the BD Logo and all other trademarks are property of Becton, Dickinson and Company.
Application Notes

Application

Flow cytometry Routinely Tested

Recommended Assay Procedure:
For detection of the Early B Lineage antigen in the spleen, we recommend amplification of the staining signal through the use of Biotin Rat Anti-Mouse CD93 (Early B Lineage) (Cat. No. 550434), followed by a "bright" second-step reagent, such as Streptavidin-PE (Cat. No. 554061).

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>553087</td>
<td>FITC Rat Anti-Mouse CD45R/B220</td>
<td>0.1 mg</td>
<td>RA3-6B2</td>
</tr>
<tr>
<td>553989</td>
<td>PE Rat IgG2b, κ Isotype Control</td>
<td>0.1 mg</td>
<td>A95-1</td>
</tr>
<tr>
<td>554680</td>
<td>PE Mouse IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</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>
<tr>
<td>550434</td>
<td>Biotin Rat Anti-Mouse CD93 (Early B Lineage)</td>
<td>0.1 mg</td>
<td>493</td>
</tr>
<tr>
<td>554061</td>
<td>PE Streptavidin</td>
<td>0.5 mg</td>
<td>(none)</td>
</tr>
</tbody>
</table>

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References