Technical Data Sheet

PE Hamster anti-Mouse CD55

Product Information

Material Number: 558037
Alternate Name: Cd55; DAF; decay-accelerating factor
Size: 0.1 mg
Concentration: 0.2 mg/ml
Clone: RIKO-5
Immunogen: GPI-DAF transfected CHO cells
Isotype: Armenian Hamster IgG3, \( \lambda \)
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing \( \leq 0.09\% \) sodium azide.

Description

The RIKO-5 monoclonal antibody specifically recognizes the membrane-associated complement regulator CD55, also known as decay-accelerating factor (DAF). CD55 is expressed on the surface of erythrocytes and most splenic leukocytes, including B and T lymphocytes and CD11b-positive splenocytes, but it is not detected on thymocytes. Immunohistochemical staining (using a different monoclonal antibody) demonstrates that CD55 is expressed on vascular endothelium and many other cell types in a wide variety of organs. In the mouse, there are two isoforms of CD55, transmembrane and GPI-anchored, that are recognized by the RIKO-5 antibody. Both isoforms are able to protect cells from complement attack by inhibiting the deposition of C3 on antibody-sensitized cells, but the RIKO-5 antibody is not able to neutralize this activity. CD97, a member of the EGF-TM7 family that is widely expressed in mouse tissues, is another ligand for CD55.

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

Two-color analysis of CD55 expression on splenic B lymphocytes. C57BL/6 splenocytes were pre-incubated with Mouse BD Fc Block™ purified anti-mouse CD16/CD32 (Cat. No. 553141/553142), stained with FITC anti-mouse CD45R/B220 (Cat. No. 553087/553088) and either PE Hamster IgG3, \( \lambda \) isotype control (Cat. No. 553980, left panel) or PE Hamster anti-Mouse CD55 (Cat. No. 58037, right panel). Dead cells were excluded by staining with propidium iodide (Cat. No. 556463), and the total viable leukocytes are displayed. The data demonstrates that CD55 is expressed on the majority of splenocytes, with the greatest density on B lymphocytes. Flow cytometry was performed on a BD FACScalibur™ flow cytometry system.
### Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>553141</td>
<td>Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)</td>
<td>0.1 mg</td>
<td>2.4G2</td>
</tr>
<tr>
<td>553142</td>
<td>Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)</td>
<td>0.5 mg</td>
<td>2.4G2</td>
</tr>
<tr>
<td>553980</td>
<td>PE Hamster IgG3 λ1 Isotype Control</td>
<td>0.1 mg</td>
<td>A19-4</td>
</tr>
<tr>
<td>556463</td>
<td>Propidium Iodide Staining Solution</td>
<td>2 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>553087</td>
<td>FITC Rat Anti-Mouse CD45R/B220</td>
<td>0.1 mg</td>
<td>RA3-6B2</td>
</tr>
<tr>
<td>553088</td>
<td>FITC Rat Anti-Mouse CD45R/B220</td>
<td>0.5 mg</td>
<td>RA3-6B2</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>

### 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.
5. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf.

### References


Miwa, T., X. Sun, et al. Characterization of glycosylphosphatidylinositol-anchored decay accelerating factor (GPI-DAF) and transmembrane DAF gene expression in wild-type and GPI-DAF gene knockout mice using polyclonal and monoclonal antibodies with dual or single specificity. *Immunology.* 2001; 104:207-214. (Biology)
