Technical Data Sheet

PE Mouse anti-Human CD52

Product Information

Material Number: 562945
Alternate Name: Cambridge pathology 1 Ag; CAMPATH-1; Epididymal secretory protein E5; HE5
Size: 50 tests
Vol. per Test: 5 µl
Clone: 4C8
Immunogen: Human T Lymphocytes
Isotype: Mouse (BALB/c) IgG3, κ
Reactivity: QC Testing: Human

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

Description

The 4C8 monoclonal antibody specifically binds to CD52 which is also known as Cambridge pathology 1 antigen (CAMPATH-1) or Human epididymis-specific protein 5 (HE5). CD52 is a highly N-glycosylated, 25-29 kDa protein whose C-terminus is glycosylphosphatidylinositol anchored in the membrane. It is highly expressed on the surface of thymocytes and mature lymphocytes but not on their stem cell precursors. It is also expressed on monocytes, dendritic cells, eosinophils and epithelial cells of the epididymis and seminal vesicles but not on neutrophils, plasma cells, platelets or erythrocytes. Although its functional role is not well characterized, the CD52 antigen serves as an exquisitely sensitive target antigen for antibody and complement-mediated lysis of CD52-positive cells. Anti-CD52 antibodies are being used clinically to remove lymphocytes from transplanted bone marrow cell preparations and in the treatment of some malignant diseases.

Flow cytometric analysis of human CD52 expression on human peripheral blood lymphocytes. Whole blood was treated with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899) to remove erythrocytes. The cells were washed and then stained with either PE Mouse IgG3, κ Isotype Control (Cat. No. 556659; dashed line histogram) or PE Mouse Anti-Human CD52 (Cat. No. 562945; solid line histogram). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer 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 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>
</thead>
<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 ml</td>
<td>(none)</td>
</tr>
<tr>
<td>555899</td>
<td>Lysing Buffer</td>
<td>100 ml</td>
<td>(none)</td>
</tr>
<tr>
<td>556659</td>
<td>PE Mouse IgG3, κ Isotype Control</td>
<td>50 tests</td>
<td>J606</td>
</tr>
</tbody>
</table>

BD Biosciences

For country contact information, visit bd Biosciences.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.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD
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. Please refer to wwwbdbiosciences.com/pharminen/protocols for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at wwwbdbiosciences.com/colors.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
6. 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.

References