Technical Data Sheet

APC Mouse Anti-Human CD16

Product Information

Material Number: 561304
Alternate Name: IgG Fc receptor III; IGFR3; FCG3; FCGR3; FCGRIII; FcyRIII
Size: 50 Tests
Vol. per Test: 5 µl
Clone: B73.1
Immunogen: Human NK Cells
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Human
Workshop: IV NL402
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The B73.1 monoclonal antibody specifically binds to CD16, the 50-70 kDa low affinity receptor for IgG, IgG Fc receptor III (FcγRIII). CD16 is expressed on NK cells, neutrophils, and on a subset of T cells from certain individuals. The B73.1 antibody binds to CD16-positive neutrophils with lower intensity when compared with some other CD16-specific antibodies. A variable number of CD16-positive lymphocytes coexpress either the CD57 antigen or low-density CD8 antigen or both. The B73.1 antibody can block Fc receptor functions mediated by CD16.

Flow cytometric analysis of CD16 on human peripheral blood lymphocytes. Human whole blood was stained with the APC Mouse Anti-Human CD16 antibody (Cat. No. 561304, solid line histogram) or with a APC Mouse IgG1, κ Isotype Control (Cat. No. 554681, dashed line histogram). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from 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 to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Application Notes

Application

Flow cytometry Routinely Tested

Recommended Assay Procedure:

CAUTION: B73.1 binding is inhibited by human serum or aggregated IgG. In whole blood preparations, CD16 shows variable reactivity with granulocytes.

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>554681</td>
<td>APC Mouse IgG1 κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</td>
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<tr>
<td>555899</td>
<td>Lysing Buffer</td>
<td>100 mL</td>
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<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<tr>
<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>(none)</td>
</tr>
</tbody>
</table>

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561304 Rev. 2
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. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Please refer to www.regdocs.bd.com to access safety data sheets (SDS).

References


