**Technical Data Sheet**

**PE Mouse Anti-Human CD56**

**Product Information**

- **Material Number:** 556647
- **Alternate Name:** N-CAM; NCAM1; NCAM-1; Neural cell adhesion molecule 1; NKH1; MSK39
- **Size:** 50 Tests
- **Vol. per Test:** 20 µl
- **Clone:** MY31
- **Immunogen:** KG1a Cell Line
- **Isotype:** Mouse (BALB/c X C57BL/6) IgG1, κ
- **Reactivity:** QC Testing: Human
- **Workshop:** V NK19
- **Storage Buffer:** Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

**Description**

Clone MY31 specifically recognizes the human form of the 220/135 kDa heavily glycosylated antigen, CD56, found on a subpopulation of peripheral blood large granular lymphocytes which demonstrate natural killer cell activity, but not on myeloid cells, erythrocytes or B cells. This clone also cross-reacts with a subset of peripheral blood lymphocytes of baboon, and both rhesus and cynomolgus macaque monkeys. The distribution on lymphocytes is similar to that observed with peripheral blood lymphocytes from normal human donors, with a subset of CD16+ cells co-expressing CD56. In contrast to what is observed with human peripheral blood cells, however, clone MY31 also reacts with a major subset of non-human primate CD14+ monocytes. Studies in rhesus macaque monkeys suggest that CD56 reacts with monocytes and not natural killer cells.

**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>556650</td>
<td>PE Mouse IgG1, κ Isotype Control</td>
<td>50 Tests</td>
<td>MOPC-21</td>
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<tr>
<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
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<tr>
<td>555899</td>
<td>Lysing Buffer</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<td>(none)</td>
</tr>
</tbody>
</table>

**Flow cytometric analysis of CD56 expression on human peripheral blood lymphocytes.** Whole blood was stained with either PE Mouse IgG1, κ Isotype Control (Cat. No. 556650; dashed line histogram) or PE Mouse Anti-Human CD56 (Cat. No. 556647; solid line histogram). Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Fluorescent histograms were derived from gated events with the side and forward light-scattering characteristics of viable lymphocytes.
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. 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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

6. 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


