APC-R700 Mouse Anti-Human CD56

Product Information
Material Number: 565139
Alternate Name: NCAM1; NCAM-1; NCAM; Leu-19; Neural cell adhesion molecule 1; NKH1; MSK39
Size: 100 Tests
Vol. per Test: 5 µl
Clone: NCAM16.2 (also known as NCAM 16)
Immunogen: Immunoaffinity-enriched adult human brain NCAM
Isotype: Mouse (BALB/c) IgG2b, κ
Reactivity: QC Testing: Human
Workshop: V NK60
Storage Buffer: Aqueous buffered solution containing BSA, protein stabilizer, glycerol and ≤0.09% sodium azide.

Description
The NCAM16.2 monoclonal antibody specifically binds to human CD56. It recognizes an extracellular immunoglobulin-like domain common to 120, 140, and 180 kDa forms of CD56, also known as the neural cell adhesion molecule (NCAM), NKH1 or MSK39. The CD56 antigen is expressed on approximately 10% to 25% of peripheral blood lymphocytes. It is present on essentially all resting and activated CD16+ natural killer (NK) lymphocytes and approximately 5% of CD3+ peripheral blood lymphocytes. CD3+ CD56+ T lymphocytes comprise a unique subset of cytotoxic T lymphocytes that mediates non-major histocompatibility complex (MHC)-restricted cytotoxicity. CD56 antigen density on NK lymphocytes increases upon cellular activation. The CD56 antigen is involved in neuronal homotypic cell adhesion and cell differentiation during embryogenesis. CD16+ CD56+ NK cells demonstrate reciprocal transfer of an activation state with dendritic cells.

This antibody was conjugated to BD Horizon APC-R700, which has been developed exclusively by BD Biosciences as a better alternative to Alexa Fluor® 700. APC-R700 excites and emits at similar wavelengths to Alexa Fluor® 700 yet exhibits significantly improved brightness. This dye can be excited by the red laser and detected with the same filter set as Alexa Fluor® (eg, 730/45-nm filter).

Flow cytometric analysis of CD56 expression on human peripheral blood lymphocytes. Human whole blood was stained with either BD Horizon™ APC-R700 Mouse IgG2b, κ Isotype Control (Cat. No. 565138; dashed line histogram) or BD Horizon APC-R700 Mouse Anti-Human CD56 antibody (Cat. No. 565139/565140; solid line histogram). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). The fluorescence histogram showing CD56 expression (or Ig Isotype control staining) was derived from gated events with the forward and side light-scatter characteristics of intact lymphocytes. Flow cytometric analysis was performed using a BD LSRFortessa™ Cell Analyzer 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 BD Horizon APC-R700 under optimum conditions, and unconjugated antibody and free BD Horizon APC-R700 were removed.

Application Notes
Application
Flow cytometry Routinely Tested

BD Biosciences
bdbiosciences.com
877.232.8995 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
BD Horizon™ Technical Data Sheet
APC-R700 Mouse Anti-Human CD56

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Application Notes
Application
Flow cytometry Routinely Tested
### Suggested Companion Products

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<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>565138</td>
<td>APC-R700 Mouse IgG2b, κ Isotype Control</td>
<td>0.1 mg</td>
<td>27-35</td>
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<tr>
<td>565140</td>
<td>APC-R700 Mouse Anti-Human CD56</td>
<td>25 Tests</td>
<td>NCAM16.2</td>
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<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</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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### Product Notices
1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
7. An isotype control should be used at the same concentration as the antibody of interest.

### References