CD56 (MY31)

FORMS

<table>
<thead>
<tr>
<th>Form</th>
<th>Catalog number</th>
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<tbody>
<tr>
<td>PE</td>
<td>340685</td>
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DESCRIPTION

Specificity

The CD56 (Leu-19)\(^1\) antibody recognizes an antigen present on natural killer (NK) lymphocytes that is the 140-kilodalton (kDa) isoform of the neural cell adhesion molecule (NCAM).\(^2\) The 140-kDa core protein is extensively glycosylated to give a mature antigen.\(^3,4\)

Antigen distribution

The CD56 antigen is present on approximately 10% to 25% of peripheral blood lymphocytes. It is present on essentially all resting and activated CD16\(^+\) NK lymphocytes and approximately 5% of CD3\(^+\) peripheral blood lymphocytes.\(^1\) CD3\(^+\)CD56\(^+\) T lymphocytes comprise a unique subset of cytotoxic T lymphocytes that mediates non-major histocompatibility complex (MHC)-restricted cytotoxicity.\(^1\) CD56 antigen density increases when NK lymphocytes are activated.\(^5\) The CD56 antigen NCAM is involved in neuronal homotypic cell adhesion and cell differentiation during embryogenesis.\(^6\)

Clone

The CD56 antibody, clone MY31, is derived from the hybridization of Sp2/0 mouse myeloma cells with spleen cells isolated from (B6 x BALB/c) F\(_1\) mice immunized with the KG1a cell line.

Composition

The CD56 antibody is composed of mouse IgG\(_1\) heavy chains and kappa light chains.

Product configuration

The following is supplied in phosphate buffered saline (PBS) containing a stabilizer and a preservative.

<table>
<thead>
<tr>
<th>Form</th>
<th>Number of tests</th>
<th>Volume per test (µL)(^a)</th>
<th>Amount provided (µg)</th>
<th>Total volume (mL)</th>
<th>Concentration (µg/mL)</th>
<th>Stabilizer</th>
<th>Preservative</th>
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<tr>
<td>PE</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>2.0</td>
<td>50</td>
<td>Gelatin</td>
<td>Sodium azide</td>
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\(^a\) Volume required to stain 10\(^6\) cells.

Purity

PE: ≤20% free fluorophore at bottling, as measured by size-exclusion chromatography (SEC)

HANDLING AND STORAGE

Store vials at 2°C–8°C. Conjugated forms should not be frozen. Protect from exposure to light. Each reagent is stable until the expiration date shown on the bottle label when stored as directed.

WARNING

All biological specimens and materials coming in contact with them are considered biohazards. Handle as if capable of transmitting infection\(^7,8\) and dispose of with proper equipment.
precautions in accordance with federal, state, and local regulations. Never pipette by mouth. Wear suitable protective clothing, eyewear, and gloves.

**CHARACTERIZATION**

To ensure consistently high-quality reagents, each lot of antibody is tested for conformance with characteristics of a standard reagent.

**WARRANTY**

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