CD57 (HNK-1)

**DESCRIPTION**

Specificity
The CD57 (Leu-7) antibody recognizes a 110-kilodalton (kDa) glycoprotein that is expressed on a subset of natural killer (NK) lymphocytes and T lymphocytes.\(^1\)\(^-\)\(^4\) The antigen is a carbohydrate structure associated with myelin-associated glycoprotein.\(^5\)

Antigen distribution
The CD57 antigen is present on 15% to 20% of normal peripheral blood mononuclear cells (PBMCs).\(^2\) It is expressed on a subset of NK lymphocytes and on a subset of T lymphocytes.\(^2\) CD57 reacts with myelin-associated glycoprotein in neuroectodermal tissue\(^6\) as well as cells of small cell lung carcinoma.\(^7\)

Clone
The CD57 antibody, clone HNK-1,\(^8\) is derived from the hybridization of P3-X63-Ag8.653 mouse myeloma cells with lymph node cells isolated from BALB/c mice immunized with membrane extracts of the HSB-2 T–lymphoblastoid cell line.

Composition
The CD57 antibody is composed of mouse IgM heavy chains and kappa light chains.

Product configuration
The following are 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>
</tr>
</thead>
<tbody>
<tr>
<td>Biotin</td>
<td>100</td>
<td>20</td>
<td>25</td>
<td>2.0</td>
<td>12.5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>FITC</td>
<td>100</td>
<td>20</td>
<td>25</td>
<td>2.0</td>
<td>12.5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

\(^a\) Volume required to stain 10\(^6\) cells.

Purity
Biotin: \(\geq 85\%\) pure at bottling, as measured by polyacrylamide gel electrophoresis (PAGE)

FITC: \(\leq 5\%\) free fluorophore at bottling, as measured by size-exclusion chromatography (SEC)

**HANDLING AND STORAGE**

Store vials at 2\(^\circ\)C–8\(^\circ\)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.

**Analyte Specific Reagent. Analytical and performance characteristics are not established.**
WARNING

All biological specimens and materials coming in contact with them are considered biohazards. Handle as if capable of transmitting infection\(^9,10\) and dispose of with proper 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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