CD5 (L17F12)

**DESCRIPTION**

**Specificity**

The CD5 antibody recognizes a human T-lymphocyte antigen, 67 kilodaltons (kDa).\(^1\)

**Antigen distribution**

The CD5 antigen is present on approximately 70% of normal peripheral blood lymphocytes and on virtually all T lymphocytes in thymus and peripheral blood.\(^2-4\) The CD5 antibody reacts with most cells in T-lymphocyte areas of spleen and lymph node and with many T-cell leukemias and lymphomas.\(^5-7\) It also reacts with a distinct subset of normal B lymphocytes,\(^8\) occasional cells in B-lymphocyte areas of spleen and lymph node,\(^5\) and most Ig\(^+\) B–chronic lymphoblastic leukemia (CLL) cells.\(^7-9\) Some lymphomas also express the CD5 antigen.\(^6\)

**Clone**

The CD5 antibody, clone L17F12,\(^1,2\) is derived from the hybridization of NS-1/Ag4 mouse myeloma cells with spleen cells isolated from BALB/c mice immunized with human T-acute lymphoblastic leukemia (ALL) cells.

**Composition**

The CD5 antibody is composed of mouse IgG\(_{2a}\) 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>Pure</td>
<td>200</td>
<td>20</td>
<td>50</td>
<td>4</td>
<td>12.5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>Biotin</td>
<td>100</td>
<td>20</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>FITC</td>
<td>100</td>
<td>20</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PE</td>
<td>100</td>
<td>20</td>
<td>12.5</td>
<td>2</td>
<td>6.25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PerCP-Cy™5.5</td>
<td>50</td>
<td>20</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>PE-Cy™7</td>
<td>100</td>
<td>5</td>
<td>3</td>
<td>0.5</td>
<td>6</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>APC</td>
<td>100</td>
<td>5</td>
<td>3</td>
<td>0.5</td>
<td>6</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

\(^a\) Volume per test will vary by form.

**Analyte Specific Reagent. Analytical and performance characteristics are not established.**
CAUTION Some PE-Cy7 conjugates show changes in their emission spectra with prolonged exposure to paraformaldehyde or light. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

CAUTION Prolonged exposure of cells to paraformaldehyde can lead to increased autofluorescence in the violet channels. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

CAUTION For optimal results, use BD Horizon™ Brilliant Stain Buffer any time two or more BD Horizon Brilliant™ dyes are used in the same multicolor staining cocktail.

Purity

Pure, biotin: ≥85% pure at bottling, as measured by polyacrylamide gel electrophoresis (PAGE)

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

PE, PerCP-Cy5.5, PE-Cy7, APC, V450: ≤20% free fluorophore at bottling, as measured by SEC

BV421: ≤25% free fluorophore at bottling, as measured by ion-exchange chromatography (IEC)

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 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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REFERENCES


PATENTS AND TRADEMARKS

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