CD20 (L27)

DESCRIPTION

Specificity

The CD20 antibody recognizes a phosphoprotein with a molecular weight of 35 or 37 kilodaltons (kDa), depending on the degree of phosphorylation. The antigen is not glycosylated.1

Antigen distribution

The CD20 antigen is expressed on B lymphocytes synchronous with the expression of surface IgM.1,2 The antigen is present on both resting and activated B lymphocytes but is lost before differentiation into plasma cells.1 The CD20 antigen is found in both mantle-zone and germinal-center areas of secondary follicles of lymphoid tissue and can be expressed on follicular dendritic cells (FDCs) in germinal centers.1 Low-level expression of the CD20 antigen has been detected on a subpopulation of T lymphocytes.3

Clone

The CD20 antibody, clone L27,4 is derived from the hybridization of Sp2/0 mouse myeloma cells with spleen cells isolated from BALB/c mice immunized with the LB lymphoblastoid cell line.

Composition

The CD20 antibody is composed of mouse IgG1 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)</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>FITC</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>2</td>
<td>50</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PE</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>1</td>
<td>25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PerCP</td>
<td>100</td>
<td>20</td>
<td>50</td>
<td>2</td>
<td>25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>PerCP-Cy™5.5</td>
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<td>20</td>
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<tr>
<td>PE-Cy™7</td>
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<td>50</td>
<td>0.5</td>
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<tr>
<td>APC</td>
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<td>0.5</td>
<td>40</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

Analyte Specific Reagent. Analytical and performance characteristics are not established.
CAUTION Some APC-Cy7 conjugates, and to a lesser extent PE-Cy7 and APC-H7 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

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

PE, PerCP, PerCP-Cy5.5, PE-Cy7, APC, APC-Cy7, APC-H7, V450, V500-C: ≤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


3. Hultin LE, Hausner MA, Hultin PM, Giorgi JV. CD20 (pan-B cell) antigen is expressed at a low level on a subpopulation of human T lymphocytes. Cytometry. 1993;14:196-204.


PATENTS AND TRADEMARKS

BD Horizon Brilliant Violet 421 is covered by one or more of the following US patents: 8,158,444; 8,362,193; 8,575,303; or 8,354,239.

APC-Cy7: US Patent 5,714,386

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