CD19 (SJ25C1)

DESCRIPTION

Specificity
The CD19 antibody recognizes a 90-kilodalton (kDa) antigen that is present on human B lymphocytes.\textsuperscript{1,2}

Antigen distribution
The CD19 antigen is present on approximately 7\% to 23\% of human peripheral blood lymphocytes\textsuperscript{3} and on splenocytes.\textsuperscript{4} CD19 is reactive with the B-lymphocyte areas of normal tonsil and lymph nodes.\textsuperscript{5} The CD19 antigen is present on human B lymphocytes at all stages of maturation.\textsuperscript{5} CD19 does not react with resting or activated T lymphocytes, granulocytes, or monocytes.\textsuperscript{6}

Clone
The CD19 antibody, clone SJ25C1,\textsuperscript{2} is derived from the hybridization of Sp2/0 mouse myeloma cells with spleen cells isolated from BALB/c mice immunized with NALM1 and NALM16 cells.

Composition
The CD19 antibody is composed of mouse IgG\textsubscript{1} heavy chains and kappa light chains.

Product configuration
The following are supplied in buffer 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>50</td>
<td>20</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PE</td>
<td>50</td>
<td>20</td>
<td>12.5</td>
<td>1</td>
<td>12.5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PerCP</td>
<td>50</td>
<td>20</td>
<td>12.5</td>
<td>1</td>
<td>12.5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PerCP-Cy5.5</td>
<td>50</td>
<td>20</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PE-Cy7</td>
<td>100</td>
<td>5</td>
<td>12.5</td>
<td>0.5</td>
<td>25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>APC</td>
<td>100</td>
<td>5</td>
<td>25</td>
<td>0.5</td>
<td>50</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>APC-R700\textsuperscript{b}</td>
<td>100</td>
<td>5</td>
<td>6.25</td>
<td>0.5</td>
<td>12.5</td>
<td>BSA</td>
<td>ProClin\textsuperscript{TM} 300</td>
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<tr>
<td>APC-Cy7</td>
<td>100</td>
<td>5</td>
<td>25</td>
<td>0.5</td>
<td>50</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>APC-H7</td>
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<td>5</td>
<td>25</td>
<td>0.5</td>
<td>50</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, APC-H7, and APC-R700 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 If you choose to combine BD Horizon Brilliant™ reagents in a multicolor staining cocktail, dyes may bind to one another without the use of a buffering solution, such as BD Horizon™ Brilliant Stain Buffer.

Purity

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

PE, PerCP, PerCP-Cy5.5, PE-Cy7, APC, APC-R700, APC-Cy7, APC-H7, AmCyan, V450: ≤20% free fluorophore at bottling, as measured by SEC

BV421, BV510, BV605: ≤25% free fluorophore, 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.

The APC-R700 conjugate is bottled with ProClin 300 and contains 0.003% of a mixture of CMIT/MIT (3:1), CAS number 55965-84-9.

<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>AmCyan</td>
<td>100</td>
<td>5</td>
<td>12.5</td>
<td>0.5</td>
<td>25</td>
<td>BSA</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>V450b</td>
<td>100</td>
<td>5</td>
<td>12.5</td>
<td>0.5</td>
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<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
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<td>ProClin 950</td>
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<tr>
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<td>50</td>
<td>0.5</td>
<td>100</td>
<td>BSA</td>
<td>0.09% Sodium azide</td>
</tr>
</tbody>
</table>

a. Volume required to stain 10⁶ cells.

b. BD Horizon™ APC-R700, BD Horizon™ V450, BD Horizon Brilliant™ Violet 421, BD Horizon Brilliant™ Violet 510, BD Horizon Brilliant™ Violet 605

Warning

H317 May cause an allergic skin reaction.

Wear protective gloves/eye protection.
Wear protective clothing.
Avoid breathing mist/vapors/spray.
If skin irritation or rash occurs: Get medical advice/attention.
IF ON SKIN: Wash with plenty of water.
Dispose of contents/container in accordance with local/regional/national/international regulations.
Visit regdocs.bd.com to download the Safety Data Sheets.

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

WARRANTY
Unless otherwise indicated in any applicable BD general conditions of sale for non-US customers, the following warranty applies to the purchase of these products.

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REFERENCES

PATENTS AND TRADEMARKS
BV421, BV510 and BV605 are covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,362,193; 8,575,303; or 8,354,239.

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