CD22 (S-HCL-1)

**DESCRIPTION**

**Specificity**

The CD22 antibody recognizes a 135-kilodalton (kDa) type I transmembrane glycoprotein in the immunoglobulin superfamily.1,2 The CD22 antigen is also known as BL-CAM, Bgp135, and Siglec2.2

**Antigen distribution**

The CD22 antigen is expressed in the cytoplasm of all B lymphocytes and is present only on the cell surface of mature B lymphocytes.3 In contrast with the CD10, CD19, and CD20 antigens, the CD22 antigen is still present on lymphoplasmacytoid cells but its expression is diminished on fully matured plasma cells.4 The CD22 antigen is expressed in most B-cell leukemias, including hairy cell leukemia,1,5 and nearly all B-cell lymphomas,6 but not in T-cell leukemias or lymphomas.7

The CD22 antigen binds to sialylated glycoproteins, mediating cell adhesion.8 The CD22 antigen modulates B-cell activation, presumably through its association with signaling molecules.8,9

**Clone**

The CD22 antibody, clone S-HCL-1,1 is derived from the hybridization of NS-1 mouse myeloma cells with spleen cells isolated from CD-1 mice immunized with whole hairy cell leukemia cells and membrane preparations derived from them.5

**Composition**

The CD22 antibody is composed of mouse IgG2b 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>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>
<tr>
<td>PE</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>PerCP-Cy™5.5</td>
<td>50</td>
<td>20</td>
<td>3</td>
<td>1.0</td>
<td>3</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>APC</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>
</tr>
</tbody>
</table>

a. Volume required to stain 10^6 cells.

Analyte Specific Reagent. Analytical and performance characteristics are not established.
Purity

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

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

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.

REFERENCES


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