CD1a (SK9)

**DESCRIPTION**

**Specificity**

The CD1a antibody recognizes a 49-kilodalton (kDa) type I transmembrane glycoprotein that associates non-covalently with β2-microglobulin.1,2

**Antigen distribution**

The CD1a antigen is present on 60% to 90% of thymocytes, some T-cell leukemias and lymphomas, Langerhans cells,3,4 and a subset of dendritic cells.3,5 The CD1a antibody does not react with peripheral blood T and B lymphocytes, monocytes, normal bone marrow mononuclear cells, or normal tonsillar B and T lymphocytes.4,6 The CD1a antigen has structural similarities to MHC class I antigens and plays a role in the presentation of non-peptide antigens.

**Clone**

The CD1a antibody, clone SK9,1 is derived from the hybridization of NS-1 mouse myeloma cells with spleen cells isolated from CD-1 mice immunized with human thymocytes.

**Composition**

The CD1a antibody is composed of mouse IgG2b 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)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>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>BV605b</td>
<td>100</td>
<td>5</td>
<td>50</td>
<td>0.5</td>
<td>100</td>
<td>BSA</td>
<td>ProClin™ 300</td>
</tr>
<tr>
<td>BV605c</td>
<td>100</td>
<td>5</td>
<td>100</td>
<td>0.5</td>
<td>200</td>
<td>BSA</td>
<td>0.09% Sodium azide</td>
</tr>
</tbody>
</table>

a. Volume required to stain 10^6 cells.
b. BD Horizon Brilliant™ Violet 605
c. New formulation

**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.

**Analyze Specific Reagent. Analytical and performance characteristics are not established.**
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.

NOTE The technical information for the BV605 conjugate was generated on a BD FACSTM brand flow cytometer using a violet laser and a 606/36 filter.

Purity
PE: ≤20% free fluorophore at bottling, as measured by size-exclusion chromatography (SEC)
BV605: ≤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.

Some reagents are bottled with ProClin 300, and contain 0.003% of a mixture of CMIT/MIT (3:1), CAS number 55965-84-9.

Visit regdocs.bd.com to download the Safety Data Sheet.

REFERENCES


**PATENTS AND TRADEMARKS**

BD Horizon Brilliant Violet 605 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,575,303; or 8,354,239.

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