CD2 (S5.2)

FORMS

<table>
<thead>
<tr>
<th>Form</th>
<th>Catalog number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITC</td>
<td>340700</td>
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<tr>
<td>PE</td>
<td>340701</td>
</tr>
<tr>
<td>V450</td>
<td>644486</td>
</tr>
</tbody>
</table>

DESCRIPTION

Specificity

The CD2 antibody recognizes a human lymphocyte antigen, 45 to 50 kilodaltons (kDa),¹ which also forms the binding site for sheep erythrocytes.²

Antigen distribution

The CD2 antigen is present on approximately 75% of normal peripheral blood lymphocytes and 95% to 99% of thymocytes.² It is also found on a subset of monocytes (approximately one-third) that might be precursors to dendritic cells.³ The CD2 antibody reacts with essentially all T lymphocytes and with a subset of natural killer (NK) lymphocytes.⁴ CD2 and CD58 have been shown to be co-receptors. The interaction of CD2 antigen and CD58 antigen facilitates antigen recognition by T lymphocytes.⁵-⁷

Clone

The CD2 antibody, clone S5.2,⁸ is derived from the hybridization of Sp2/0 mouse myeloma cells with spleen cells isolated from BALB/c mice immunized with T lymphocytes activated by mixed lymphocyte culture.

Composition

The CD2 antibody is composed of mouse IgG₂a 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>
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<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>
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<tr>
<td>PE</td>
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<td>20</td>
<td>12.5</td>
<td>2.0</td>
<td>6.25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>V450b</td>
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<td>25</td>
<td>0.5</td>
<td>50</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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</tbody>
</table>

ᵃ. Volume required to stain 10⁶ cells.
ᵇ. BD Horizon™ V450

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.

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, V450: ≤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 infection⁹,¹⁰ 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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