CD49d (9F10)

DESCRIPTION

Specificity
The CD49d antibody recognizes the 150-kilodalton (kDa) type I transmembrane glycoprotein, integrin α4. The CD49d antigen associates with one of two β integrin subunits, β1 (CD29) or β7, to form the integrins α4β1 (VLA-4) or α4β7, respectively.1,2

Antigen distribution
The CD49d antigen is expressed on a broad variety of leucocytes. As a subunit of VLA-4, the CD49d antigen is expressed on lymphocytes, monocytes, thymocytes, natural killer (NK) cells, and several B- and T-cell lines, with the possible exception of neutrophils and platelets. It is also expressed on non-lymphoid tissues.1,3 As a subunit of α4β7, the CD49d antigen is expressed on most lymph node T and B cells, NK cells, and eosinophils.1

Clone
The CD49d antibody, clone 9F10,11 is derived from the hybridization of mouse myeloma cells with spleen cells isolated from immunized mice.

Composition
The CD49d antibody is composed of mouse IgG1 heavy chains and kappa light chains.

Product configuration
The following is 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>APC-H7</td>
<td>100</td>
<td>5</td>
<td>12.5</td>
<td>0.5</td>
<td>25</td>
<td>BSA</td>
<td>ProClin® 300</td>
</tr>
</tbody>
</table>

a. Volume required to stain 10^6 cells.

CAUTION Some 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.

Purity
APC-H7: ≤20% free fluorophore at bottling, as measured by size-exclusion chromatography (SEC)

Analyte Specific Reagent. Analytical and performance characteristics are not established.
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\(^{12,13}\) 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.

**Warning**

H317 May cause an allergic skin reaction.
Wear protective gloves / eye protection. Wear protective clothing. Avoid breathing mist/vapours/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.

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


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