CD10 (MEM-78)

DESCRIPTION

Specificity

The CD10 antibody recognizes a 100-kilodalton (kDa) type II transmembrane, glycosylated, zinc-containing metalloprotease.¹ The CD10 antigen is also known as common acute lymphoblastic leukemia antigen (CALLA), neutral endopeptidase (NEP), gp100, and enkephalinase.²

Antigen distribution

The CD10 antigen is found on lymphocytes from samples with acute B-lymphoid leukemia.³ The CD10 antigen is also present on a wide variety of normal and neoplastic cell types including renal epithelia, fibroblasts, granulocytes, germinal center B lymphocytes,⁴ neutrophils,⁵⁶ some T-cell leukemias,⁸ and some lymphoma, melanoma, and glioma cell lines.⁶

The CD10 antigen cleaves a number of biologically active peptides,⁹ including fMLP, and may modulate the chemotactic activity of fMLP towards neutrophils.¹⁰ Inhibition of the CD10 antigen promotes B-cell maturation,¹¹ suggesting that it plays a role in B-cell development.

Clone

The CD10 antibody, clone MEM-78,¹² is derived from the hybridization of mouse myeloma cells with spleen cells isolated from mice immunized with a cell preparation of the pre–B-cell line, NALM-6.

Composition

The CD10 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)</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>6</td>
<td>1</td>
<td>6</td>
<td>BSA</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

a. Volume required to stain 10⁶ cells.

Purity

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

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

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