Monoclonal Antibodies  
Detecting Human Antigens

**CD10 (W8E7)**

**Form**  
**Catalog number**
Pure 347500
FITC 347503

Product availability varies by region. Contact BD Biosciences Customer Support or your local sales representative for information.

**RESEARCH APPLICATIONS**

Research applications include studies of:

- Characterization of non-T (common) acute lymphoblastic leukemias (ALL)\(^1,2\)
- Early stages of hematopoietic differentiation\(^3-5\)

**Specificity**

The CD10 antibody (Anti-CALLA) recognizes a human common acute lymphoblastic leukemia antigen (CALLA), with a molecular weight of 100 kilodaltons (kDa).\(^6,7\)

The CD10 antigen is identical to human membrane–associated neutral endopeptidase (NEP; EC 3.3.24.11), also known as enkephalinase.\(^8\)

**Antigen distribution**

The CD10 antigen is found on lymphocytes from acute B-lymphoid leukemia samples.\(^9\)

The antigen is also present on a wide variety of normal and neoplastic cell types including renal epithelium, fibroblasts, granulocytes, and some lymphoma, melanoma, and glioma cell lines.\(^8\)

**Clone**

The CD10 antibody, clone W8E7, is derived from the hybridization of P3-X63-Ag8.653 mouse myeloma cells with spleen cells of BALB/c mice immunized with blasts from a patient with non-T ALL.

**Composition**

The CD10 antibody is composed of mouse IgG\(_{2a}\) 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>Pure</td>
<td>100</td>
<td>20</td>
<td>12</td>
<td>2.0</td>
<td>6</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>FITC</td>
<td>100</td>
<td>20</td>
<td>12</td>
<td>2.0</td>
<td>6</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

\(^a\) Volume required to stain \(10^6\) cells.

**CAUTION** Do not use ammonium chloride for lysing red cells after antibody staining with CD10, clone W8E7. When stained samples are lysed with ammonium chloride, the antibody-antigen complex becomes unstable and can result in loss of CD10 staining.

**PROCEDURE**

Visit our website (bdbiosciences.com) or contact your local BD representative for the lyse/wash protocol for direct immunofluorescence.

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For Research Use Only. Not for use in diagnostic or therapeutic procedures.
REPRESENTATIVE DATA

Flow cytometric analysis was performed on REH cells stained with the indicated conjugated antibody. Laser excitation was at 488 nm. Representative data analyzed with a BD FACSTM brand flow cytometer is shown in the following figure.

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 infection10,11 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. Representative flow cytometric data is included in this data sheet.

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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