FMC7

Monoclonal Antibodies
Detecting Human Antigens

Research applications include studies of B-lymphocyte:
- Neoplasms\(^1,2\)
- Differentiation in bone marrow\(^3,4\)

**DESCRIPTION**

**Specificity**

The FMC7 antibody recognizes a 105-kilodalton (kDa) membrane glycoprotein expressed on a subset of B lymphocytes.\(^5\)

**Antigen distribution**

More than 50% of the peripheral B lymphocytes of normal adults carry the FMC7 antigen at variable density. FMC7-positive B cells are more mature, and they include the subpopulation that responds in vitro to mitogens or antigens.\(^5-7\) The FMC7 antigen is found on B-cell malignancies of most differentiated stages, such as mantle cell lymphoma, but not in most cases of chronic lymphocytic leukemia (CLL).\(^8-10\)

**Clone**

Clone FMC7 is derived from the fusion of P3-NS1-1-AG4-1 mouse myeloma cells with spleen cells from BALB/c mice immunized with human B-lymphoblastoid cell line HRIK.\(^5\)

**Composition**

The FMC7 antibody is composed of mouse IgM heavy chains and kappa light chains.

**Product configuration**

The following reagents 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>FITC</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>1.0</td>
<td>25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>V450(^b)</td>
<td>100</td>
<td>5</td>
<td>50</td>
<td>0.5</td>
<td>100</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

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

\(^b\) Supplied in HEPES buffer, 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.

**PROCEDURE**

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

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

Flow cytometric analysis was performed on whole blood. Laser excitation was at 405 nm and 488 nm.

**Figure 1** Representative data analyzed with a BD FACS™ brand flow cytometer

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 infection11,12 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.

The products sold hereunder are warranted only to conform to the quantity and contents stated on the label or in the product labeling at the time of delivery to the customer. BD disclaims hereby all other warranties, expressed or implied, including warranties of merchantability and fitness for any particular purpose and noninfringement. BD’s sole liability is limited to either replacement of the products or refund of the purchase price. BD is not liable for property damage or any incidental or consequential damages, including personal injury, or economic loss, caused by the product.

REFERENCES


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