

# Monoclonal Antibodies Detecting Human Antigens



## FMC7

Form	Catalog number
FITC	340919
V450	644493

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

### RESEARCH APPLICATIONS

Research applications include studies of B-lymphocyte:

- Neoplasms<sup>1,2</sup>
- Differentiation in bone marrow<sup>3,4</sup>

### DESCRIPTION

#### Specificity

The FMC7 antibody recognizes a 105-kilodalton (kDa) membrane glycoprotein expressed on a subset of B lymphocytes.<sup>5</sup>

#### 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.<sup>5-7</sup> 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).<sup>8-10</sup>

#### 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.<sup>5</sup>

#### 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.

Form	Number of tests	Volume per test (μL) <sup>a</sup>	Amount provided (μg)	Total volume (mL)	Concentration (μg/mL)	Stabilizer	Preservative
FITC	50	20	25	1.0	25	Gelatin	0.1% Sodium azide
V450 <sup>b</sup>	100	5	50	0.5	100	Gelatin	0.1% Sodium azide

a. Volume required to stain 10<sup>6</sup> 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](http://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.**

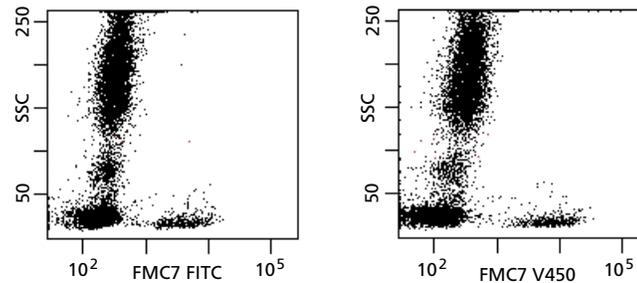
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## REPRESENTATIVE DATA

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 FACSTM 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 infection<sup>11,12</sup> 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.

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## REFERENCES

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