**β2-Microglobulin (TÜ99)**

**Form**

PerCP-Cy™5.5 656645

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

### RESEARCH APPLICATIONS

Research applications include:

- Transport of major histocompatibility complex (MHC) class I heavy chain molecules to the cell surface

- Antigen presentation by MHC class I molecules

- Study of CD8⁺ T cells

- Investigation into T-cell–based immunotherapy

- Characterization of leukemias and lymphomas

### DESCRIPTION

**Specificity**

The β2-Microglobulin antibody specifically recognizes β2-microglobulin, a 12-kilodalton (kDa) protein with homology to the constant region of immunoglobulin molecules.

**Antigen distribution**

The β2-Microglobulin antigen is found on the surface of most nucleated cells. The β2-Microglobulin antigen heterodimerizes with a polymorphic heavy chain to form the MHC class I molecule. β2-Microglobulin–deficient mice show a greatly reduced expression of MHC class I molecules on the cell surface, resulting in a substantial reduction in the number of mature CD8⁺ T cells.

**Clone**

The β2-Microglobulin antibody, clone TÜ99, is derived from the hybridization of P3-NS1/1-Ag4-1 mouse myeloma cells with spleen cells isolated from BALB/c mice immunized with a human uncloned primed lymphocyte typing (PLT) cell line.

**Composition**

The β2-Microglobulin antibody is composed of mouse IgM 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>PerCP-Cy™5.5</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>
</tbody>
</table>

a. Volume required to stain 10⁶ cells.

### 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.
Flow cytometric analysis was performed on whole blood 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 plot.

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.

All biological specimens and materials coming in contact with them are considered biohazards. Handle as if capable of transmitting infection14,15 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.

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.

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REFERENCES


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