Monoclonal Antibodies Detecting Human Antigens

BD FastImmune™ Anti-Human IFN-γ (25723.11)

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

Research applications include studies of:
- Lymphocyte subsets based on cytokine expression
- Disease pathogenesis
- Activated lymphocytes
- Thymocyte development
- T H1 and T H2 lymphocytes
- T-lymphocyte effector functions

DESCRIPTION

Specificity
The Anti-Human Interferon-γ (Anti-Hu–IFN-γ) antibody recognizes a 20 to 25-kilodalton (kDa) glycoprotein.

Antigen distribution
Upon activation, IFN-γ is produced by CD8+ T-lymphocyte subsets, by the T H0 and T H1 subsets of CD4+ T lymphocytes, and by natural killer (NK) lymphocytes. IFN-γ is a multifunctional immunomodulator with antitumor and antiviral activity. IFN-γ is a pleiotropic cytokine instrumental in the regulation of immune and inflammatory processes, and it has a role in the differentiation and function of monocytes.

Clone
The Anti-Hu–IFN-γ antibody, clone 25723.11, is derived from the hybridization of P3X-63-Ag8.653 mouse myeloma cells with lymph node cells from BALB/c mice immunized with recombinant human IFN-γ.

Composition
The Anti-Hu–IFN-γ antibody is composed of mouse IgG2b 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)</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>12.5</td>
<td>1.0</td>
<td>12.5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PE</td>
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<td>7.5</td>
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<td>7.5</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>APC</td>
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<td>5</td>
<td>6.0</td>
<td>0.5</td>
<td>12</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

a. Volume required to stain 10^6 cells.

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RESEARCH APPLICATIONS

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

Abbreviated intracellular staining
1. After surface staining activated whole blood with fluorescent-conjugated monoclonal antibodies, lyse the red blood cells by adding 2 mL of 1X BD FACS™ lysing solution (Cat. No. 349202).
2. Vortex gently and incubate 5 to 10 minutes at room temperature.
3. Centrifuge at 500 x g for 5 minutes.
4. Add 500 µL of 1X BD FACS™ Permeabilizing Solution (Cat. No. 340457).
5. Vortex and incubate for 10 minutes at room temperature in the dark.
6. Wash by adding PBS containing 0.5% bovine serum albumin (BSA) and 0.1% sodium azide (NaN₃), and centrifuge for 5 minutes.
7. Add 20 µL of fluorescent-conjugated intracellular antibodies.
8. Vortex and incubate for 30 minutes at room temperature in the dark.
9. Repeat wash step.
10. Resuspend cells in 1% paraformaldehyde in PBS.

REPRESENTATIVE DATA
Flow cytometric analysis was performed on four-hour PMA + ionomycin–activated lysed whole blood and gated on the CD3⁺ T-lymphocyte population. Laser excitation was at 488 nm and 635 nm. Representative data analyzed with a BD FACS™ brand flow cytometer is shown in the following plots.

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 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


