**Monoclonal Antibodies Detecting Human Antigens**

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**Anti-HLA-DR (L243)**

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

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**RESEARCH APPLICATIONS**

Research applications include:

- Enumeration of B lymphocytes and monocytes in peripheral blood
- Research on leukemias and lymphomas\(^1,2\)
- Study of the expression of HLA-DR antigens on activated T lymphocytes\(^3,4\)
- Immunoprecipitation of HLA-DR antigens\(^5\)
- Study of dendritic cell subsets in peripheral blood and lymphoid tissues\(^6-8\)

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**DESCRIPTION**

**Specificity**

Anti-HLA-DR recognizes a human class II major histocompatibility complex (MHC) antigen.\(^9,10\) The antigen is a transmembrane glycoprotein composed of α- and β-subunits that have molecular weights of 36 and 27 kilodaltons (kDa), respectively.\(^9,10\)

**Antigen distribution**

HLA-DR is expressed on B lymphocytes, monocytes, macrophages, activated T lymphocytes, activated natural killer (NK) lymphocytes, and human progenitor cells.\(^3,11-15\) It is also present on thymic epithelium, B-lymphocyte–dependent areas of spleen and lymph node, and B-cell lymphomas.\(^1,2,14-16\)

**Clone**

Anti-HLA-DR, clone L243, is derived from the hybridization of NS-1/1-Ag4 mouse myeloma cells with spleen cells from BALB/c mice immunized with the human lymphoblastoid B-cell line RPMI 8866.\(^9\)

**Composition**

Anti-HLA-DR is composed of mouse IgG\(_{2a}\) 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>
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<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>
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For Research Use Only. Not for use in diagnostic or therapeutic procedures.

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San Jose, CA 95131 USA

bdbiosciences.com
ResearchApplications@bd.com

08/2015 23-1304-16
CAUTION Some APC-Cy7 conjugates, and to a lesser extent PE-Cy7 and APC-H7 conjugates, show changes in their emission spectra with prolonged exposure to paraformaldehyde or light. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

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.

**REPRESENTATIVE DATA**
Flow cytometric analysis was performed on whole blood stained with the indicated conjugated antibody. Laser excitation was at 405 nm, 488 nm, and 635 nm. Representative data analyzed with a BD FACS™ brand flow cytometer is shown in the following plots.

<table>
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<td>Gelatin</td>
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</table>

a. Volume required to stain 10⁶ cells.
b. BD Horizon™ V450.
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 infection17,18 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

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REFERENCES


APC-Cy7: US Patent 5,714,386

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