**FITC Mouse Anti-Human HLA-DR**

**Product Information**

- **Material Number:** 555811
- **Alternate Name:** MHC class II antigen; HLA class II histocompatibility antigen
- **Size:** 100 Tests
- **Vol. per Test:** 20 µl
- **Clone:** G46-6
- **Isotype:** Mouse IgG2a, κ
- **Reactivity:**
  - QC Testing: Human
  - Tested in Development: Rhesus, Cynomolgus, Baboon
  - Reported Reactivity: Dog
- **Storage Buffer:** Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

**Description**

The G46-6 monoclonal antibody specifically binds to HLA-DR, a major histocompatibility complex (MHC) class II antigen. HLA-DR antigens are encoded by genes within the Human Leukocyte Antigen (HLA) Complex located on chromosome 6. HLA-DR is a transmembrane heterodimeric glycoprotein composed of an α chain (36 kDa) and a β subunit (27 kDa) expressed primarily on antigen presenting cells: B cells, dendritic cells, monocytes, macrophages, and thymic epithelial cells. HLA-DR is also expressed on activated T cells. This molecule plays a major role in mediating cellular interactions during antigen presentation to CD4-positive T cells.

**Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

**Application Notes**

**Application**

- **Flow cytometry** Routinely Tested

**Suggested Companion Products**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tr>
<td>555573</td>
<td>FITC Mouse IgG2a, κ Isotype Control</td>
<td>100 Tests</td>
<td>G155-178</td>
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<tr>
<td>560944</td>
<td>FITC Mouse Anti-Human HLA-DR</td>
<td>25 Tests</td>
<td>G46-6</td>
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<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<tr>
<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
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<td>Lysing Buffer</td>
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**Flow cytometric analysis of HLA-DR on human peripheral blood lymphocytes.** Human whole blood was lysed with BD FACSTM Lysing Solution (Cat. No. 349202) and stained with FITC Mouse IgG2a, κ Isotype Control (Cat. No. 555573; dashed line histogram) or with FITC Mouse Anti-Human HLA-DR (Cat. No. 555811/560944/556643; solid line histogram). Fluorescent histograms showing expression of HLA-DR (or Ig isotype staining) were derived from gated events based on forward and side light scattering characteristics for intact lymphocytes. Flow cytometric analysis was performed on a BD FACScan™ system.
Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.

References

Herodin F, Thullier P, Garin D, Drouet M. Nonhuman primates are relevant models for research in hematolgy, immunology and virology. Eur Cytokine Netw. 2005; 16(2):104-116. (Biology)