**DESCRIPTION**

Species Reactivity: Human  
Specificity: Detects human HLA-DR.  
Source: Monoclonal Mouse IgG1, Clone # L203  
Purification: Protein A or G purified from hybridoma culture supernatant  
Immunogen: RPMI 8866 human lymphoblastoid cells  
Accession #: P01903  
Formulation: Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.  
*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Application</th>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>2.5 μg/10^6 cells</td>
<td>Human peripheral blood lymphocytes</td>
</tr>
<tr>
<td>CyTOF-ready</td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
<td></td>
</tr>
</tbody>
</table>

**PREPARATION AND STORAGE**

Reconstitution: Reconstitute at 0.5 mg/mL in sterile PBS.  
Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  
*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
- 12 months from date of receipt, -20 to -70 °C as supplied.  
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

HLA-DR is a transmembrane human major histocompatibility complex 2 (MHC II) family member and consists of a 34 kDa (alpha) subunit and one of several 28 kDa (beta) subunits. HLA-DR is expressed primarily by B cells and dendritic cells (DC), in which it binds peptides derived from internalized and processed antigenic proteins. It presents these peptides on the cell surface for recognition by the T cell receptor on CD4+ T cells. This interaction is central to antigen specificity in the adaptive immune response. HLA-DR alleles, polymorphisms, and aberrant expression are linked to a variety of diseases including autoimmunity and cancer.