

DESCRIPTION	
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects a synthetic peptide around aa 100 in Direct ELISA.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 1083110
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Synthetic Peptide Accession # P01903
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

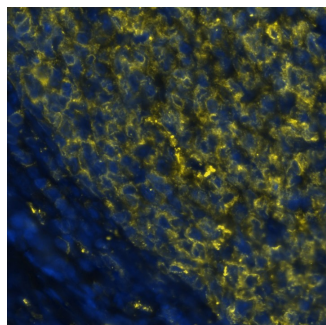
**APPLICATIONS**

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.

	Recommended Concentration	Sample
<b>Western Blot</b>	2 µg/mL	HDLM-2 human Hodgkin's lymphoma cell line and Raji human Burkitt's lymphoma cell line
<b>Multiplex Immunofluorescence</b>	1 µg/mL	Immersion fixed paraffin-embedded sections of Human Tonsil tissue
<b>Immunohistochemistry</b>	3-25 µg/mL	Immersion fixed paraffin-embedded sections of human tonsil
<b>Simple Western</b>	20 µg/mL	HDLM-2 human Hodgkin's lymphoma cell line

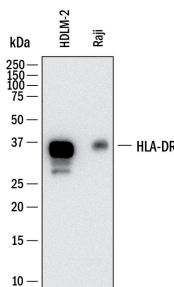
**DATA**

**Multiplex Immunofluorescence**



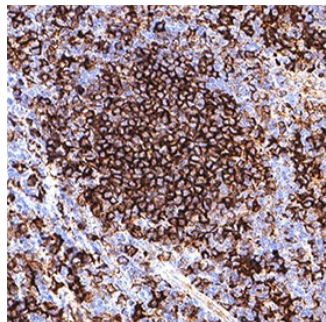
**Detection of HLA-DRA in Human Tonsil via Multiplex Immunofluorescence staining on COMET™.** HLA-DRA was detected in immersion fixed paraffin-embedded sections of human tonsil using Mouse Anti-Human HLA-DRA Monoclonal Antibody (Catalog # MAB11555) at 1 µg/mL at 37 °Celsius for 2 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9). Tissue was stained using the Alexa Fluor™ 555 Goat anti-Mouse IgG Secondary Antibody at 1:100 at 37 °Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR555MS) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in COMET™ Panel Builder.

**Western Blot**



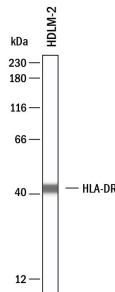
**Detection of Human HLA-DR by Western Blot.** Western Blot shows lysates of HDLM-2 human Hodgkin's lymphoma cell line and Raji human Burkitt's lymphoma cell line. PVDF membrane was probed with 2 µg/ml of Mouse Anti-Human HLA-DR Monoclonal Antibody (Catalog # MAB11555) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for HLA-DR at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

**Immunohistochemistry**



**Detection of HLA-DR in Human Tonsil.** HLA-DR was detected in immersion fixed paraffin-embedded sections of human tonsil using Mouse Anti-Human HLA-DR Monoclonal Antibody (Catalog # MAB11555) at 1 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001) or the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the membrane. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

**Simple Western**



**Detection of Human HLA-DR by Simple Western™.** Simple Western shows lysates of HDLM-2 human Hodgkin's lymphoma cell line, loaded at 1 mg/ml. A specific band was detected for HLA-DR at approximately 42 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human HLA-DR Monoclonal Antibody (Catalog # MAB11555). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute lyophilized material at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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<sup>+</sup> 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.