

**HLA DR Rabbit mAb**  
Catalog # AP77516**Specification**

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**HLA DR Rabbit mAb - Product Information**

Application	<b>WB, IHC, IF</b>
Primary Accession	<a href="#">P01903</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>28621</b>

**HLA DR Rabbit mAb - Additional Information****Gene ID** 3122**Other Names**

HLA-DRA

**Dilution**

WB~~1/500-1/1000

IHC~~1/50-1/100

IF~~1/50-1/200

**Format**

Liquid

**HLA DR Rabbit mAb - Protein Information****Name** HLA-DRA**Synonyms** HLA-DRA1**Function**

An alpha chain of antigen-presenting major histocompatibility complex class II (MHCII) molecule. In complex with the beta chain HLA-DRB, displays antigenic peptides on professional antigen presenting cells (APCs) for recognition by alpha-beta T cell receptor (TCR) on HLA-DR-restricted CD4-positive T cells. This guides antigen-specific T- helper effector functions, both antibody-mediated immune response and macrophage activation, to ultimately eliminate the infectious agents and transformed cells (PubMed:<a

href="http://www.uniprot.org/citations/15265931" target="\_blank"&gt;15265931&lt;/a&gt;, PubMed:&lt;a

href="http://www.uniprot.org/citations/15322540" target="\_blank"&gt;15322540&lt;/a&gt;, PubMed:&lt;a

href="http://www.uniprot.org/citations/17334368" target="\_blank"&gt;17334368&lt;/a&gt;, PubMed:&lt;a

href="http://www.uniprot.org/citations/22327072" target="\_blank"&gt;22327072&lt;/a&gt;, PubMed:&lt;a

href="http://www.uniprot.org/citations/24190431" target="\_blank"&gt;24190431&lt;/a&gt;, PubMed:&lt;a

href="http://www.uniprot.org/citations/27591323" target="\_blank"&gt;27591323&lt;/a&gt;, PubMed:&lt;a

href="http://www.uniprot.org/citations/29884618" target="\_blank"&gt;29884618&lt;/a&gt;, PubMed:&lt;a

href="http://www.uniprot.org/citations/31495665" target="\_blank"&gt;31495665&lt;/a&gt;, PubMed:&lt;a

[8145819](http://www.uniprot.org/citations/8145819), PubMed: [9075930](http://www.uniprot.org/citations/9075930)). Typically presents extracellular peptide antigens of 10 to 30 amino acids that arise from proteolysis of endocytosed antigens in lysosomes (PubMed: [8145819](http://www.uniprot.org/citations/8145819)). In the tumor microenvironment, presents antigenic peptides that are primarily generated in tumor-resident APCs likely via phagocytosis of apoptotic tumor cells or macropinocytosis of secreted tumor proteins (PubMed: [31495665](http://www.uniprot.org/citations/31495665)). Presents peptides derived from intracellular proteins that are trapped in autolysosomes after macroautophagy, a mechanism especially relevant for T cell selection in the thymus and central immune tolerance (PubMed: [17182262](http://www.uniprot.org/citations/17182262), PubMed: [23783831](http://www.uniprot.org/citations/23783831)). The selection of the immunodominant epitopes follows two processing modes: 'bind first, cut/trim later' for pathogen-derived antigenic peptides and 'cut first, bind later' for autoantigens/self- peptides (PubMed: [25413013](http://www.uniprot.org/citations/25413013)). The anchor residue at position 1 of the peptide N-terminus, usually a large hydrophobic residue, is essential for high affinity interaction with MHCII molecules (PubMed: [8145819](http://www.uniprot.org/citations/8145819)).

### Cellular Location

Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Early endosome membrane; Single-pass type I membrane protein. Late endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein. Autolysosome membrane; Single-pass type I membrane protein. Note=The MHCII complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell membrane for antigen presentation (PubMed:18305173, PubMed:9075930). Component of immunological synapses at the interface between T cell and APC (PubMed:15322540, PubMed:29884618).

### Tissue Location

Expressed in professional APCs: macrophages, dendritic cells and B cells (at protein level) (PubMed:15322540, PubMed:23783831, PubMed:31495665). Expressed in thymic epithelial cells (at protein level) (PubMed:23783831).

## HLA DR Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## HLA DR Rabbit mAb - Images



