

**Anti-HLA-DRA Antibody**  
**Rabbit Anti Human Polyclonal Antibody**  
**Catalog # ALS18325****Specification****Anti-HLA-DRA Antibody - Product Information**

Application	<b>WB, IHC-P</b>
Primary Accession	<a href="#">P01903</a>
Predicted	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>28621</b>

**Anti-HLA-DRA Antibody - Additional Information****Gene ID** 3122

Alias Symbol	<b>HLA-DRA</b>
<b>Other Names</b>	HLA-DRA, HLA-DRA1, MHC cell surface glycoprotein, MHC class II antigen DRA, MLRW

**Reconstitution & Storage**

Affinity purified

**Precautions**

Anti-HLA-DRA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-HLA-DRA Antibody - 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">15265931</a>, PubMed:<a href="http://www.uniprot.org/citations/15322540" target="\_blank">15322540</a>, PubMed:<a href="http://www.uniprot.org/citations/17334368" target="\_blank">17334368</a>, PubMed:<a href="http://www.uniprot.org/citations/22327072" target="\_blank">22327072</a>, PubMed:<a href="http://www.uniprot.org/citations/24190431" target="\_blank">24190431</a>, PubMed:<a href="http://www.uniprot.org/citations/27591323" target="\_blank">27591323</a>, PubMed:<a

<http://www.uniprot.org/citations/29884618> target="\_blank">29884618</a>, PubMed:<a href="http://www.uniprot.org/citations/31495665" target="\_blank">31495665</a>, PubMed:<a href="http://www.uniprot.org/citations/8145819" target="\_blank">8145819</a>, PubMed:<a href="http://www.uniprot.org/citations/9075930" target="\_blank">9075930</a>). Typically presents extracellular peptide antigens of 10 to 30 amino acids that arise from proteolysis of endocytosed antigens in lysosomes (PubMed:<a href="http://www.uniprot.org/citations/8145819" target="\_blank">8145819</a>). 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:<a href="http://www.uniprot.org/citations/31495665" target="\_blank">31495665</a>). 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:<a href="http://www.uniprot.org/citations/17182262" target="\_blank">17182262</a>, PubMed:<a href="http://www.uniprot.org/citations/23783831" target="\_blank">23783831</a>). 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:<a href="http://www.uniprot.org/citations/25413013" target="\_blank">25413013</a>). 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:<a href="http://www.uniprot.org/citations/8145819" target="\_blank">8145819</a>).

### 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).

## Anti-HLA-DRA Antibody - 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](#)

## Anti-HLA-DRA Antibody - Images