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Anti-HLA-DRA Antibody
Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18325

Specification

Anti-HLA-DRA Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P01903
Predicted	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**28621**

Anti-HLA-DRA Antibody - Additional Information

Gene ID 3122

Alias Symbol	**HLA-DRA**

Other Names
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:29884618, PubMed:17334368, PubMed:8145819, PubMed:15322540, PubMed:22327072, PubMed:27591323, PubMed:<a

href="http://www.uniprot.org/citations/31495665" target="_blank">31495665, PubMed:15265931, PubMed:9075930, PubMed:24190431). Typically presents extracellular peptide antigens of 10 to 30 amino acids that arise from proteolysis of endocytosed antigens in lysosomes (PubMed: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). 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, PubMed: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). 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).

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:9075930, PubMed:18305173). 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:31495665, PubMed:15322540, PubMed:23783831). 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 Cytomety
- Cell Culture

Anti-HLA-DRA Antibody - Images