# Recombinant HLA-DRA (MHC II) Antibody

Rabbit Monoclonal Antibody [Clone HLA-DRA/17694R]

| Catalog No | Format | Size |
|---|---|---|
| 3122-RBM12-P0 | Purified Ab with BSA and Azide at 200ug/ml | 20 ug |
| 3122-RBM12-P1 | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 3122-RBM12-P1ABX | Purified Ab WITHOUT BSA or Azide at 1.0mg/ml | 100 ug |

| Applications | Tested Dillution | Note |
|---|---|---|
| Immunohistochemistry (IHC) | 1-2ug/ml | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB) | 2-4ug/ml | |

## Product Details

| | |
|---|---|
| **Clone** | HLA-DRA/17694R |
| **Immunogen** | Recombinant human HLA-DRA protein |
| **Host** | Rabbit |
| **Clonality** | Monoclonal |
| **Isotype / Light Chain** | IgG / Kappa |
| **Mol. Weight of Antigen** | 28.62kDa |
| **Cellular Localization** | Autolysosome membrane, Cell membrane, Early endosome membrane, Endoplasmic reticulum membrane, Late endosome membrane, Lysosome membrane |
| **Species Reactivity** | Human |
| **Positive Control** | Expressed in professional APCs: macrophages, dendritic cells and B cells (at protein level) (PubMed:15322540, PubMed:23783831, PubMed:31495665) |

**Optimal dilution for a specific application should be determined.*

## Product Images for Recombinant HLA-DRA (MHC II) Antibody

### Specificity & Comments

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:15265931, PubMed:15322540, PubMed:17334368, PubMed:22327072, PubMed:24190431, PubMed:27591323, PubMed:29884618, PubMed:31495665, PubMed:8145819, PubMed:9075930). 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).

### Supplied As

200ug/ml of Ab produced in a mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.