

HLA-DRB

Mouse Monoclonal antibody(Mab) Catalog # AD80380

Product Information

Application	IHC-P
Primary Accession	<u>P01911</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	624E7A9
Calculated MW	29966

Additional Information

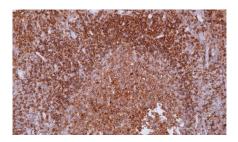
Gene ID Gene Name Other Names	3123 HLA-DRB1 HLA class II histocompatibility antigen, DRB1 beta chain, Human leukocyte antigen DRB1, HLA-DRB1, HLA-DRB1 (<u>HGNC:4948</u>)
Dilution	IHC-P~~Ready-to-use
Storage	Maintain refrigerated at 2-8°C.
Precautions	HLA-DRB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HLA-DRB1 (<u>HGNC:4948</u>)
Function	A beta chain of antigen-presenting major histocompatibility complex class II (MHCII) molecule. In complex with the alpha chain HLA- DRA, displays antigenic peptides on professional antigen presenting cells (APCs) for recognition by alpha-beta T cell receptor (TCR) on HLA-DRB1-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:16148104, PubMed:22327072, PubMed:27591323, PubMed:29884618, PubMed:31495665, PubMed:8642306). 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

Cellular Location	 macroautophagy, a mechanism especially relevant for T cell selection in the thymus and central immune tolerance (PubMed:<u>17182262</u>, PubMed:<u>23783831</u>). 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:<u>25413013</u>). 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:<u>8145819</u>). Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein. Late endosome membrane; Single-pass type I membrane Note=The MHC class II complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell membrane for antigen
Tissue Location	presentation (PubMed:18305173). Component of immunological synapses at the interface between T cell and APC (PubMed:29884618). Expressed in professional APCs: monocyte/macrophages, dendritic cells and B cells (at protein level) (PubMed:19830726, PubMed:23783831, PubMed:31495665). Expressed in thymic epithelial cells (at protein level) (PubMed:23783831)

Images



扁桃体

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.