

Rabbit Anti-MHC Class II antibody

SL4298R

Product Name:	MHC Class II
Chinese Name:	组织相容性复合体β抗体
Alias:	MHC Class II; HLA-DMβ; DMA; DMB; DP beta 1; DPB 1; DPB1; DRB; HLA class II histocompatibility antigen DM beta chain; HLA DMB; HLA DPB1; HLADM; HLADP1B; Major histocompatibility complex class II; Major histocompatibility complex class II DP beta 1; MHC class II antigen DMB; MHC DPB1; RING6; RING7; MHC2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	29kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MHC Class II:201-296/296 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	HLA-DMB belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DMA) and a beta (DMB) chain, both anchored in

the membrane. It is located in intracellular vesicles. DM plays a central role in the peptide loading of MHC class II molecules by helping to release the CLIP (class II-associated invariant chain peptide) molecule from the peptide binding site. Class II molecules are expressed in antigen presenting cells (APC: B lymphocytes, dendritic cells, macrophages). The beta chain is approximately 26-28 kDa and its gene contains 6 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and exon 5 encodes the cytoplasmic tail. [provided by RefSeq, Jul 2008]

Function:

Plays a critical role in MHC class II antigen processing by stabilizing peptide-free class II alpha/beta heterodimers in a complex soon after their synthesis and directing transport of the complex from the endoplasmic reticulum to the endosomal/lysosomal system where the antigen processing and binding of antigenic peptides to MHC class II takes place. Serves as cell surface receptor for the cytokine MIF.

Subunit:

Homotrimer. In the endoplasmic reticulum (ER) it forms an heterononameric MHC II-Ii complex: 3 MHC class II molecules (heterodimers of an alpha and a beta subunit) bind to the CD74 homotrimer (also known as invariant chain or HLA class II histocompatibility antigen gamma chain). In the endosomal/lysosomal system, the CD74 component undergoes sequential degradation by various proteases, including CTSS and CTSL, leaving a small fragment termed CLIP (class-II-associated invariant chain peptide) attached to the MHC class II molecule (alpha-beta-CLIP complex). This processed complex interacts with HLA_DM and HLA_DO heterodimers in order to release CLIP and facilitate the binding of antigenic peptides to the MHC class II molecules.

Subcellular Location:

Cell membrane; Single-pass type II membrane protein (Potential). Endoplasmic reticulum membrane. Golgi apparatus, trans-Golgi network. Endosome. Lysosome.

Similarity:

Contains 1 thyroglobulin type-1 domain.

SWISS:

P04233

Gene ID:

3109

Database links:

Entrez Gene: 3109 Human

Entrez Gene: 3115 Human

Omim: 142800 Human

SwissProt: P04440 Human

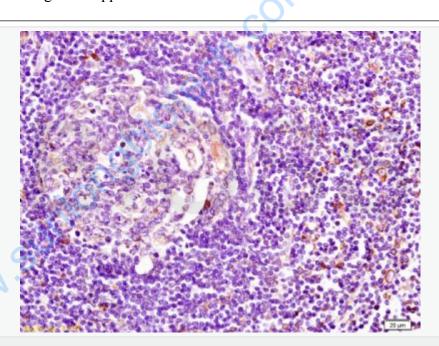
SwissProt: P28068 Human

Unigene: 351279 Human

Unigene: 485130 Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: Human pancreatic cancer; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-HLA DMβ Polyclonal Antibody, Unconjugated(SL4298R) 1:200,

overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and
DAB(C-0010) staining

