

HLA-DMB Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18052c

Specification

HLA-DMB Antibody (Center) - Product Information

Application WB,E **Primary Accession** P28068 Other Accession NP 002109.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 28931 Antigen Region 127-154

HLA-DMB Antibody (Center) - Additional Information

Gene ID 3109

Other Names

HLA class II histocompatibility antigen, DM beta chain, MHC class II antigen DMB, Really interesting new gene 7 protein, HLA-DMB, DMB, RING7

Target/Specificity

This HLA-DMB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 127-154 amino acids from the Central region of human HLA-DMB.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

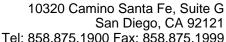
Precautions

HLA-DMB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HLA-DMB Antibody (Center) - Protein Information

Name HLA-DMB

Synonyms DMB, RING7





Function Plays a critical role in catalyzing the release of class II- associated invariant chain peptide (CLIP) from newly synthesized MHC class II molecules and freeing the peptide binding site for acquisition of antigenic peptides. In B-cells, the interaction between HLA-DM and MHC class II molecules is regulated by HLA-DO.

Cellular Location

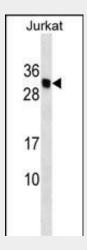
Late endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein. Note=Localizes to late endocytic compartment. Associates with lysosome membranes

HLA-DMB Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

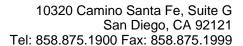
HLA-DMB Antibody (Center) - Images



HLA-DMB Antibody (Center) (Cat. #AP18052c) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the HLA-DMB antibody detected the HLA-DMB protein (arrow).

HLA-DMB Antibody (Center) - Background

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.

HLA-DMB Antibody (Center) - References

Rinderknecht, C.H., et al. Immunology 131(1):18-32(2010) Bailey, S.D., et al. Diabetes Care (2010) In press: Davila, S., et al. Genes Immun. 11(3):232-238(2010) Ferrante, A., et al. J. Immunol. 184(3):1153-1158(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)