

**HLA-DMB Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP18052c****Specification**

---

**HLA-DMB Antibody (Center) Blocking Peptide - Product Information**

Primary Accession [P28068](#)

**HLA-DMB Antibody (Center) Blocking Peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**HLA-DMB Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **HLA-DMB Antibody (Center) Blocking Peptide - Images**

### **HLA-DMB Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)