

## Product Information

### **MemDX™ Membrane Protein Human HLA-DOB (Major histocompatibility complex, class II, DO beta) for Antibody Discovery**

Cat. No.: **MP0490J**

This product is for research use only and is not intended for diagnostic use.

This product is a 30.6 kDa Human HLA-DOB membrane protein expressed in HEK293T. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

#### Product Specifications

##### Host Species

Human

##### Target Protein

HLA-DOB

##### Protein Length

Full-length

##### Protein Class

Transmembrane

##### Molecular Weight

30.6 kDa

##### TMD

1

##### Sequence

MSGGWVPWVVALLVNLRDSSMTQGTDSPEDFVIQAKADCYFTNGTEKVQFVVRFIFNLEEYVRFDS  
GMFVALTKLGQPD AEQWNSRLDLLERSRQAVDGVCRHNYRLGAPFTVGRKVQPEVTYYPERTPL  
LHCSVTGFYPGDIKIKWFLNGQEERAGVMSTGPIRNGDWTFQTVVMLEMTPELGHVYTCLVDH  
SSLLSPV  
SVEWRAQSEYSWRKMLSGIAAFLGLIFLLVGIVQLRAQKGYVRTQMSGNEVSRAVLLPQSC

#### Product Description

##### Expression Systems

HEK293T

##### Tag

C-Myc/DDK

##### Form

Liquid

**Purification**

Anti-DDK affinity column followed by conventional chromatography steps

**Purity**

> 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer**

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

**Storage**

Store at +4°C for up to one week or several months at -80°C

**Target****Target Protein**

HLA-DOB

**Full Name**

Major histocompatibility complex, class II, DO beta

**Introduction**

HLA-DOB belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DOA) and a beta chain (DOB), both anchored in the membrane. It is located in intracellular vesicles. DO suppresses peptide loading of MHC class II molecules by inhibiting HLA-DM. 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.

**Alternative Names**

DOB; HLA\_DOB

**Gene ID**

[3112](#)

**UniProt ID**

[P13765](#)