

# Product Information

## MemDX™ Membrane Protein Human HLA-DQB3 (Major histocompatibility complex, class II, DR beta 3) for Antibody Discovery

Cat. No.: **MP0517X**

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

This product is a 55 kDa Human HLA-DQB3 membrane protein expressed in *in vitro* wheat germ expression system. 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-DQB3

#### Protein Length

Full-length

#### Molecular Weight

55 kDa

#### TMD

1

#### Sequence

MVCLKLPGGSSLAALTVTLMVLSSRLAFAGDTRPRFLELRKSECHFFNGTERVRYLDRYFHNQEEFLRFDSDVGEYRAVTELGRP

### Product Description

#### Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

#### Expression Systems

*in vitro* wheat germ expression system

#### Tag

GST-tag at N-terminal

#### Form

Liquid

#### Purification

Glutathione Sepharose 4 Fast Flow

**Buffer**

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer

**Storage**

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

**Target****Target Protein**

HLA-DQB3

**Full Name**

Major histocompatibility complex, class II, DR beta 3

**Introduction**

HLA-DRB3 belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DRA) and a beta (DRB) chain, both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. Class II molecules are expressed in antigen presenting cells. 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. Within the DR molecule the beta chain contains all the polymorphisms specifying the peptide binding specificities. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. There are multiple pseudogenes of this gene

**Alternative Names**

DRB3; HLA-DPB1; HLA-DR1B; HLA-DR3B; HLA-DRB3\*

**Gene ID**

[3125](#)

**UniProt ID**

[P79483](#)