

# Product Information

## **MemDX™ Membrane Protein Human HLA-DRB5 (Major histocompatibility complex, class II, DR beta 5) Full Length**

Cat. No.: **MPC2931K**

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

This product is a made-to-order Human HLA-DRB5 membrane protein expressed in HEK293. 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-DRB5

#### Protein Length

Full length

#### Protein Class

Immunity

#### TMD

1

#### Sequence

MVCLKLPGGSYMAKLTVTLMVLSSPLALAGDTRPRFLQQDKYECHFFNGT  
ERVRFLHRDIYNQEEDLRFDSDVGEYRAVTELGRPDAEYWNSQKDFLEDR  
RAAVDTYCRHNYGVGESFTVQRRVEPKVTVYPARTQTLQHNNLLVCSVNG  
FYPGSIEVRWFRNSQEEKAGVVSTGLIQNGDWTFQTLVMLETVPRSGEVY  
TCQVEHPSVTSPLTVEWRAQSESAQSKMLSGVGGFVLGLLFLGAGLFIYF  
KNQKGHSGHLHPTGLVS

### Product Description

#### Expression Systems

HEK293

#### Tag

Based on specific requirements

#### Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

**Form**

Liquid

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

**Target****Target Protein**

HLA-DRB5

**Full Name**

Major histocompatibility complex, class II, DR beta 5

**Introduction**

HLA-DRB5 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**

HLA-DRB5; HLA-DRB5\*; DR beta-5; HLA class II histocompatibility antigen, DR-5 beta chain; MHC class II antigen DRB5; Major histocompatibility complex, class II, DR beta 5

**Gene ID**

[3127](#)

**UniProt ID**

[Q30154](#)