

Product Information

MemDX™ Membrane Protein Human HLA-DPB1 (Major histocompatibility complex, class II, DP beta 1) Expressed in *E.coli* with 6xHis tag at the N-terminus for Antibody Discovery, Partial (30-223aa)

Cat. No.: **MPX4452K**

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

This product is a 26.8kDa Human HLA-DPB1 membrane protein expressed in *E.coli*. 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-DPB1

Protein Length

Partial (30-223aa)

Protein Class

Immunity

Molecular Weight

26.8kDa

TMD

1

Sequence

RATPENYLFQGRQECYAFNGTQRFLERYIYNREEFARFSDVGEFRAVTELGRPAAEYWNSQKDILEEKRAVPDRMCRHNYELGG

Product Description

Expression Systems

E.coli

Tag

6xHis tag at the N-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Purity

>90% as determined by SDS-PAGE

Buffer

Tris-based buffer, 50% glycerol

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target**Target Protein**

HLA-DPB1

Full Name

Major histocompatibility complex, class II, DP beta 1

Introduction

HLA-DPB belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DPA) and a beta chain (DPB), 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 (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. Within the DP molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to 4 different molecules.

Alternative Names

HLA-DPB1; DPB1; HLA-DP; HLA-DPB; HLA-DP1B; HLA class II histocompatibility antigen, DP beta 1 chain; HLA class II histocompatibility antigen, DP(W4) beta chain; HLA-DP histocompatibility type, beta-1 subunit; MHC HLA DPB1; MHC class II HLA-DP-beta-1; MHC class II antigen DPB1; Major histocompatibility complex, class II, DP beta 1

Gene ID

[3115](#)

UniProt ID

[P04440](#)