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Product Information

MemDX™ Membrane Protein Human HLA-DQB1 (Major histocompatibility complex, class II, DQ beta 1) expressed in *E.coli* for Antibody Discovery

Cat. No.: **MP1424J**
This product is for research use only and is not intended for diagnostic use.

This product is a 27 kDa Human HLA-DQB1 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-DQB1

Protein Length
Partial (33-227aa)

Protein Class
Human Leukocyte Antigen

Molecular Weight
27 kDa

TMD
1

Sequence
RDSPEDFVYQFKAMCYFTNGTERVRYVTRYIYNREEYARFDSDVEVYRAVTPLGPPDAEYWNSQKEVLERTRAELDTVCRHNYQL

Product Description

Expression Systems
E.coli

Tag
N-6xHis

Form
Liquid or Lyophilized powder

Reconstitution

Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration).

Purity

>85% as determined by SDS-PAGE

Buffer

Liquid: Tris/PBS-based buffer, 5%-50% glycerol
Lyophilized powder: Tris/PBS-based buffer, 6% Trehalose, pH 8.0

Storage

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

Target

Target Protein

HLA-DQB1

Full Name

Major histocompatibility complex, class II, DQ beta 1

Introduction

HLA-DQB1 belongs to the HLA class II beta chain paralogs. This class II molecule is a heterodimer consisting of an alpha (DQA) and a beta chain (DQB), 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 it contains six exons. Exon 1 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 DQ molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to four different molecules. Typing for these polymorphisms is routinely done for bone marrow transplantation. Alternative splicing results in multiple transcript variants.

Alternative Names

CELIAC1; DQ beta 1 chain; DQB1_HUMAN; HLA class II histocompatibility antigen; HLA class II histocompatibility antigen; DQ beta 1 chain; HLA class II histocompatibility antigen; DQ beta 2 chain; HLA DQB; HLA DQB1; HLA-DQB1; HLA-DQB2; IDDM1; Lymphocyte antigen; Major histocompatibility complex class II beta; Major histocompatibility complex; class II; DQ beta 1; MHC class II antigen DQB1; MHC class II antigen HLA DQ beta 1; MHC class II DQ beta chain; MHC class II HLA DQ beta glycoprotein; MHC class2 antigen; MHC DQ beta; OTTHUMP00000029167; OTTHUMP00000178569; OTTHUMP00000178570; OTTHUMP00000178571

Gene ID

3119

UniProt ID

P01920

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