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Product Information

MemDX™ Membrane Protein Human HLA-DQA1 (Major histocompatibility complex, class II, DQ alpha 1) expressed in *E.coli* for Antibody Discovery

Cat. No.: **MP1425J**
This product is for research use only and is not intended for diagnostic use.

This product is a 25.4 kDa Human HLA-DQA1 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-DQA1

Protein Length
Partial (24-213aa)

Protein Class
Human Leukocyte Antigen

Molecular Weight
25.4 kDa

TMD
1

Sequence
EDIVADHVASYGVNLYQSYGPSGQYTHEFDGDEQFYVDLGRKETVWCLPVLRQFRFDPQFALTNIAVLKHNLNSLIKRSNSTAATN

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

>90% 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-DQA1

Full Name

Major histocompatibility complex, class II, DQ alpha 1

Introduction

HLA-DQA1 belongs to the HLA class II alpha chain paralogues. The 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 alpha chain is approximately 33-35 kDa. It is encoded by 5 exons; exon 1 encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, and exon 4 encodes the transmembrane domain and 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 Names

CD; CELIAC1; DC 1 alpha chain; DC alpha; DC-1 alpha chain; DC-alpha; DC1; included; DQ alpha 1 chain; DQ-A1; DQ-DRW9 alpha chain; DQA1_HUMAN; FLJ27088; FLJ27328; Gluten-sensitive enteropathy (celiac disease); GSE; HLA class II histocompatibility antigen; HLA class II histocompatibility antigen; DQ alpha 1 chain; HLA class II histocompatibility antigen; DQ(W3) alpha chain; HLA-DCA; HLA-DQA; HLA-DQA1; HLA-DQA1 major histocompatibility complex; class II; DQ alpha 1; HLADC histocompatibility type; Immune response antigens HIa; included; leucocyte antigen DQA1; leukocyte antigen alpha chain; LOC100133678; LOC100507686; LOC100509457; Major histocompatibility complex; class II; DQ alpha 1; MGC149527; MHC class II antigen; MHC class II DQA1; MHC class II HLA-D alpha glycoprotein; MHC class II HLA-DQ alpha 1; MHC class II surface glycoprotein; MHC HLA-DQ alpha; OTTHUMP00000029141; OTTHUMP00000176885; OTTHUMP00000178551; OTTHUMP00000178552; OTTHUMP00000233817

Gene ID

3117

UniProt ID

P01909