

Product Information

MemDX™ Membrane Protein Human HLA-DPA1 (Major histocompatibility complex, class II, DP alpha 1) Full Length

Cat. No.: **MPC2930K**

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

This product is a made-to-order Human HLA-DPA1 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-DPA1

Protein Length

Full length

Protein Class

Immunity

TMD

1

Sequence

MRPEDRMFHIRAVILRALSLAFLLSLRGAGAIKADHVSTYAAFVQTHRPT
GEFMFEFDEDEMFYVDLDKKETVWHLEEFGQAFSFEAQGGLANIAILNNN
LNTLIQRSNHTQATNDPPEVTVPKEPVELGQPNTLICHIDKFFPPVLNV
TWLCNGELVTEGVAESLFLPRTDYSFHKFHYLTFVPSAEDFYDCRVEHWG
LDQPLLKHWEAQEPIQMPETTETVLCALGLVLGLVGIIVGTVLIKSLRS
GHDPRAQGTL

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-DPA1

Full Name

Major histocompatibility complex, class II, DP alpha 1

Introduction

HLA-DPA1 belongs to the HLA class II alpha chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DPA) and a beta (DPB) 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 (APC: B lymphocytes, dendritic cells, macrophages). The alpha chain is approximately 33-35 kDa and its gene contains 5 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and 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-DPA1; DPA1; PLT1; HLADP; HLASB; DP(W3); DP(W4); HLA-DPA; HLA-DP1A; HLA-DPB1; HLA class II histocompatibility antigen, DP alpha 1 chain; HLA DPA1; HLA-DPA1*01:03:01:New; HLA-DPA1*02:01:01:NEW; HLA-SB alpha chain; MHC class II DP alpha chain; MHC class II DP3-alpha; MHC class II HLA-DPA1 antigen; MHC class II antigen DP alpha chain; MHC class II protein; Major histocompatibility complex, class II, DP alpha 1

Gene ID

[3113](#)

UniProt ID

[P20036](#)