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Product Information

MemDX™ Membrane Protein Human HLA-DQB1 (Major histocompatibility complex, class II, DQ beta 1) Full Length

Cat. No.: **MPC1210K**
This product is for research use only and is not intended for diagnostic use.

This product is a 29.9 kDa Human HLA-DQB1 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-DQB1

Protein Length
Full length

Protein Class
Immunity

Molecular Weight
29.9 kDa

TMD
1

Sequence
MSWKKALRIPGGLRAATVTLMLAMLSTPVAEGRDSPEDFVYQFKAMCYFT
NGTERVRYVTRYIYNREEYARFDSDVEVYRAVTPLGPPDAEYWNSQKEVL
ERTRAELDTVCRHNYQLELRTTLQRRVEPTVTISPSRTEALNHHNLLVCS
VTDFYPAQIKVRWFRNDQEETTGVVSTPLIRNGDWTFQILVMLEMTPQHG
DVYTCHVEHPSLQNPITVEWRAQSESAQSKMLSGIGGFVLGLIFLGLGLI
IHHRSQKGLLH

Product Description

Expression Systems
HEK293

Tag
Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

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-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

HLA-DQB1; IDDM1; CELIAC1; HLA-DQB; HLA class II histocompatibility antigen, DQ beta 1 chain; MHC class II DQ beta chain; MHC class II HLA-DQ beta glycoprotein; MHC class II antigen DQB1; MHC class II antigen HLA-DQ-beta-1; Major histocompatibility complex, class II, DQ beta 1

Gene ID

3119

UniProt ID

P01920