

Recombinant Human HLA-DQA1, GST-tagged

Cat. No. HLA-DQA1-13819H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HLA-DQA1 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
Species	Human
Source	E.coli
ProteinLength	24-220a.a.
Description	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.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH8.) added with 100mM

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GSH and 1% Triton X-100,15%glycerol.

GENE INFORMATION

Gene Name	HLA-DQA1 major histocompatibility complex, class II, DQ alpha 1 [Homo sapiens]
Official Symbol	HLA-DQA1
Synonyms	HLA-DQA1; major histocompatibility complex, class II, DQ alpha 1; HLA DQA; HLA class II histocompatibility antigen, DQ alpha 1 chain; CELIAC1; HLA-DCA; DC-alpha; DC-1 alpha chain; MHC HLA-DQ alpha; MHC class II DQA1; MHC class II antigen; leucocyte antigen DQA1; MHC class II HLA-DQ-alpha-1; leukocyte antigen alpha chain; MHC class II surface glycoprotein; MHC class II HLA-D alpha glycoprotein; HLA class II histocompatibility antigen, DQ(W3) alpha chain; CD; GSE; DQ-A1; HLA-DQA; FLJ27088; FLJ27328; MGC149527;
Gene ID	3117
mRNA Refseq	NM_002122
Protein Refseq	NP_002113
MIM	146880
UniProt ID	P01909
Chromosome Location	6p21.3
Pathway	Adaptive Immune System, organism-specific biosystem; Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Antigen processing and

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presentation, organism-specific biosystem; Antigen processing and presentation, conserved biosystem; Asthma, organism-specific biosystem; Asthma, conserved biosystem;

Function

MHC class II receptor activity; MHC class II receptor activity;

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