

# **Product datasheet for TP309921L**

#### OriGene Technologies, Inc.

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## HLADQA1 (HLA-DQA1) (NM\_002122) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human major histocompatibility complex, class II, DQ alpha 1 (HLA-

DQA1), 1 mg

Species: Human Expression Host: HEK293T

**Expression cDNA Clone** >RC209921 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MILNKALLLGALALTTVMSPCGGEDIVADHVASCGVNLYQFYGPSGQFTHEFDGDEQFYVDLEKKETAWR WPEFSKFGGFDPQGALRNMAVAKHNLNIMIKRYNSTAATNEVPEVTVFSKSPVTLGQPNTLICLDNIFPP VVNITWLSNGHAVTEGVSETSFLSKSDHSFFKISYLTFLPSADEIYDCKVEHWGLDQPLLKHWEPEIPAP

MSELTETVVCALGLSVGLVGIVVGTVFIIQGLRSVGASRHQGPL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

**Predicted MW:** 27.8 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 002113

**Locus ID:** 3117



#### HLADQA1 (HLA-DQA1) (NM\_002122) Human Recombinant Protein - TP309921L

UniProt ID: <u>P01909</u>, <u>P01908</u>, <u>A0A173ADG5</u>, <u>Q8MH44</u>

RefSeq Size: 1542 Cytogenetics: 6p21.32 RefSeq ORF: 762

Synonyms: CELIAC1; DQ-A1; DQA1; HLA-DQA

Summary: 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. [provided by RefSeq, Jul 2008]

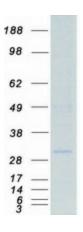
**Protein Families:** Transmembrane

Protein Pathways: Allograft rejection, Antigen processing and presentation, Asthma, Autoimmune thyroid

disease, Cell adhesion molecules (CAMs), Graft-versus-host disease, Systemic lupus

erythematosus, Type I diabetes mellitus, Viral myocarditis

### **Product images:**



Coomassie blue staining of purified HLA-DQA1 protein (Cat# [TP309921]). The protein was produced from HEK293T cells transfected with HLA-DQA1 cDNA clone (Cat# [RC209921]) using MegaTran 2.0 (Cat# [TT210002]).