

## Product datasheet for TP309921M

### 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), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC209921 protein sequence Red=Cloning site Green=Tags(s)

MILNKALLL GALALTTVMSPCGGEDIVADHVASCGVNLYQFYGPSGQFTHEFDGDEQFYVDLEKKETAWR  
WPEFSKFGGFDPQGALRNMAVAKHNLNIMIKRYNSTAATNEVPEVTVFSKSPVTLGQPNTLICLDNIFFP  
VVNITWLSNGHAVTEGVSETSFLSKSDHSFFKISYLTFLPSADEIYDCKVEHWGLDQPLLKHWEPEIPAP  
MSELTETVWCALGLSVGLVGIWGTVFIIQGLRSVGASRHQGPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	27.8 kDa
Concentration:	>0.05 µg/µL 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:	<a href="#">NP_002113</a>
Locus ID:	3117



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UniProt ID: [P01909](#), [P01908](#), [A0A173ADG5](#), [Q8MH44](#)

RefSeq Size: 1542

Cytogenetics: 6p21.32

RefSeq ORF: 762

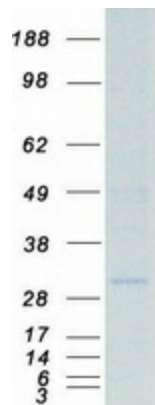
Synonyms: CELIAC1; DQ-A1; DQA1; HLA-DQA

**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]).