

Product datasheet for PH309921

HLADQA1 (HLA-DQA1) (NM_002122) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	HLA MS Standard C13 and N15-labeled recombinant protein (NP_002113)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC209921
Predicted MW:	27.8 kDa
Protein Sequence:	<p>>RC209921 protein sequence</p> <p>Red=Cloning site Green=Tags(s)</p> <p>MILNKALLLGALALTTVMSPCGGEDIADHVASCGVNLVYQFYGPSGQFTHEFDGDEQFYVDLEKKETAWR WPEFSKFGGFDPPQALRNMAVAKHNLNIMIKRYNSTAATNEVPEVTVFSKSPVTLGQPNLTICLDNIFPP VVNITWLSNGHAVTEGVSETSFLSKSDHSFFKISYLTFLPSADEIYDCKVEHWGLDQPLLKHWEPEIPAP MSELTETVVCALGLSVGLVGIVVGTVFIIQGLRSVGASRHQGPL</p> <p>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</p>
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_002113
RefSeq Size:	1542
RefSeq ORF:	762
Synonyms:	CELIAC1; DQ-A1; DQA1; HLA-DQA
Locus ID:	3117
UniProt ID:	P01909 , P01908 , A0A173ADG5 , Q8MH44


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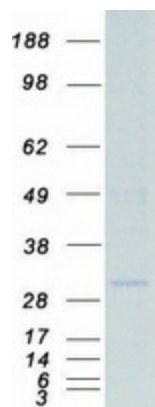
Cytogenetics: 6p21.32

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]).