

## Product datasheet for RC209921L2V

## OriGene Technologies, Inc.

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## HLADQA1 (HLA-DQA1) (NM 002122) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: HLADQA1 (HLA-DQA1) (NM\_002122) Human Tagged ORF Clone Lentiviral Particle

Symbol: HLADQA1

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

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_002122

ORF Size: 762 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC209921).

Sequence:

OTI Disclaimer:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 002122.3

 RefSeq Size:
 1542 bp

 RefSeq ORF:
 768 bp

 Locus ID:
 3117

 UniProt ID:
 P01909

 Cytogenetics:
 6p21.32

**Domains:** MHC\_II\_alpha, ig, IGc1

**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

**MW:** 27.8 kDa

Gene 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]