

Product datasheet for RC222843L1

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

HLA DP (HLA-DPA1) (NM 033554) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: HLA DP (HLA-DPA1) (NM_033554) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: HLA DP

Synonyms: DP(W3); DP(W4); DPA1; HLA-DP1A; HLA-DPA; HLA-DPB1; HLADP; HLASB; PLT1

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

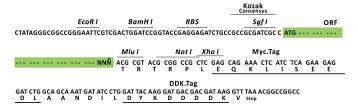
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC222843).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_033554

ORF Size: 780 bp



HLA DP (HLA-DPA1) (NM_033554) Human Tagged Lenti ORF Clone - RC222843L1

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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 033554.2</u>

 RefSeq Size:
 1157 bp

 RefSeq ORF:
 783 bp

 Locus ID:
 3113

 UniProt ID:
 P20036

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: 26.1 kDa

Gene Summary: HLA-DPA1 belongs to the HLA class II alpha chain paralogues. This class II molecule is a

heterodimer consisting of an alpha (DPA) and a beta (DPB) chain, 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 and its gene contains 5 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and the cytoplasmic

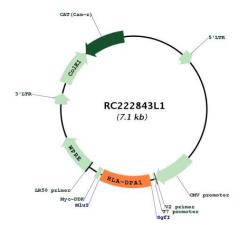
tail. Within the DP molecule both the alpha chain and the beta chain contain the

polymorphisms specifying the peptide binding specificities, resulting in up to 4 different

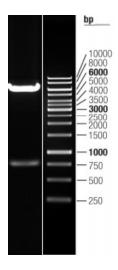
molecules. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC222843L1



Double digestion of RC222843L1 using Sgfl and Mlul