

Product datasheet for RC204966L1

OriGene Technologies, Inc.

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HLA (HLA-DPB1) (NM_002121) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: HLA (HLA-DPB1) (NM_002121) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: HLA-DPB1

Synonyms: DPB1; HLA-DP; HLA-DP1B; HLA-DPB

Mammalian Cell None

Selection:

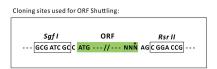
Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

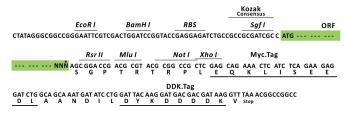
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204966).

Sequence:

Restriction Sites: Sgfl-Rsrll

Cloning Scheme:





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

ACCN: NM_002121

ORF Size: 771 bp



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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 002121.4</u>

 RefSeq Size:
 4055 bp

 RefSeq ORF:
 777 bp

 Locus ID:
 3115

 UniProt ID:
 P04440

Cytogenetics:

Domains: MHC_II_beta, ig, IGc1

6p21.32

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: 29.2 kDa

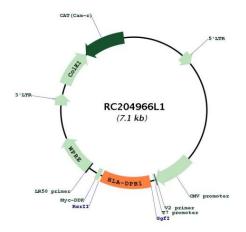
Gene Summary: HLA-DPB belongs to the HLA class II beta chain paralogues. This class II molecule is a

heterodimer consisting of an alpha (DPA) and a beta chain (DPB), 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 beta chain is approximately 26-28 kDa and its gene contains 6 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and exon 5 encodes 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

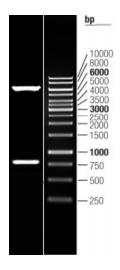
molecules. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC204966L1



Double digestion of RC204966L1 using Sgfl and Rsrll