

Product datasheet for RC203646L4

OriGene Technologies, Inc.

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HLA (HLA-DRB5) (NM_002125) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: HLA (HLA-DRB5) (NM_002125) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: HLA-DRB5
Synonyms: HLA-DRB5*

Selection:

Mammalian Cell

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert o

Sequence:

The ORF insert of this clone is exactly the same as(RC203646).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_002125

ORF Size: 798 bp



HLA (HLA-DRB5) (NM_002125) Human Tagged Lenti ORF Clone - RC203646L4

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.

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

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

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

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: NM 002125.3

RefSeq Size: 1171 bp RefSeq ORF: 801 bp Locus ID: 3127

UniProt ID: Q30154 Cytogenetics: 6p21.32

Domains: MHC II beta, 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, Hematopoietic cell

lineage, Systemic lupus erythematosus, Type I diabetes mellitus, Viral myocarditis

MW: 30.1 kDa

HLA-DRB5 belongs to the HLA class II beta chain paralogues. This class II molecule is a **Gene Summary:**

> heterodimer consisting of an alpha (DRA) and a beta (DRB) 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. The beta chain is approximately 26-28 kDa and its gene contains 6 exons. Exon one encodes the leader

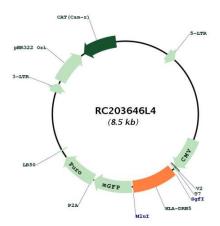
peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the

transmembrane domain and exon 5 encodes the cytoplasmic tail. Within the DR molecule the beta chain contains all the polymorphisms specifying the peptide binding specificities. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation.

There are multiple pseudogenes of this gene. [provided by RefSeq, Feb 2020]



Product images:



Circular map for RC203646L4