

Product datasheet for RC218764L4V

OriGene Technologies, Inc.

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HLA (HLA-DRB1) (NM_002124) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: HLA (HLA-DRB1) (NM 002124) Human Tagged ORF Clone Lentiviral Particle

Symbol: HLA-DRB1

Synonyms: DRB1; HLA-DR1B; HLA-DRB; SS1

Mammalian Cell

Selection:

Puromycin

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

Tag: mGFP

ACCN: NM_002124

ORF Size: 798 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC218764).

Sequence:

Cytogenetics:

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 002124.1

 RefSeq Size:
 1182 bp

 RefSeq ORF:
 801 bp

 Locus ID:
 3123

 UniProt ID:
 P04229

Domains: MHC_II_beta, ig, IGc1

6p21.32

Protein Families: Transmembrane





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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 kDa

Gene Summary: HLA-DRB1 belongs to the HLA class II beta chain paralogs. The class II molecule is a

heterodimer consisting of an alpha (DRA) and a beta chain (DRB), 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. It is encoded by 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. Hundreds of DRB1 alleles have been described and some alleles have increased frequencies associated with certain diseases or conditions. For example, DRB1*1302 has been related to acute and chronic hepatitis B virus persistence. There are multiple pseudogenes of this gene.

[provided by RefSeq, Jul 2020]