

Product datasheet for RC209920L4

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 (HLA-DRA) (NM_019111) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: HLA (HLA-DRA) (NM_019111) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: HLA-DRA

Synonyms: HLA-DRA1

Mammalian Cell Puromycin

Selection:

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

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

ORF Nucleotide The ORF insert of

Sequence:

The ORF insert of this clone is exactly the same as(RC209920).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_019111

ORF Size: 762 bp





HLA (HLA-DRA) (NM_019111) Human Tagged Lenti ORF Clone - RC209920L4

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 019111.3</u>

RefSeq Size:1312 bpRefSeq ORF:765 bpLocus ID:3122

UniProt ID: P01903

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, Hematopoietic cell

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

MW: 28.6 kDa

Gene Summary: HLA-DRA is one of the HLA class II alpha chain paralogues. This class II molecule is a

heterodimer consisting of an alpha and a beta chain, both anchored in the membrane. This

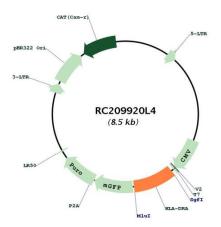
molecule is expressed on the surface of various antigen presenting cells such as B

lymphocytes, dendritic cells, and monocytes/macrophages, and plays a central role in the immune system and response by presenting peptides derived from extracellular proteins, in particular, pathogen-derived peptides to T cells. The alpha chain is approximately 33-35 kDa and its gene contains 5 exons. Exon 1 encodes the leader peptide, exons 2 and 3 encode the

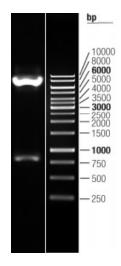
two extracellular domains, and exon 4 encodes the transmembrane domain and the cytoplasmic tail. DRA does not have polymorphisms in the peptide binding part and acts as the sole alpha chain for DRB1, DRB3, DRB4 and DRB5. [provided by RefSeq, Aug 2020]



Product images:



Circular map for RC209920L4



Double digestion of RC209920L4 using Sgfl and Mlul