

## Product datasheet for RC202743

### HLA-DRB4 (NM\_021983) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HLA-DRB4 (NM_021983) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HLA-DRB4
Synonyms:	DR4; DRB4; HLA-DR4B; HLA-DRB4*
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202743 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGTGTCTGAAGCTCCCTGGAGGCTCCTGTATGGCAGCGCTGACAGTGACATTGACGGTGCTGAGCT  
CCCCACTGGCTTTGGCTGGGGACACCCAACCACGTTTCTTGGAGCAGGCTAAGTGTGAGTGTCAATTCCT  
CAATGGGACGGAGCGAGTGTGGAACCTGATCAGATACATCTATAACCAAGAGGAGTACGCGCGCTACAAC  
AGTGACCTGGGGAGTACCAGGCGGTGACGGAGCTGGGGCGCCTGACGCTGAGTACTGGAACAGCCAGA  
AGGACCTCCTGGAGCGGAGGCGGCCGAGGTGGACACCTACTGCAGATACTCAAGACCCAGCCCTGCAGCAC  
CACAACCTCCTGGTCTGCTCTGTGAATGTTTTCTATCCAGGCAGCATTGAAGTCAGTGGTTCCGGAACG  
GCCAGGAAGAGAAGGCTGGGGTGGTGTCCACAGGCCTGATCCAGAATGGAGACTGGACCTCCAGACCTT  
GGTGTGCTGGAAACAGTTCTCGGAGTGGAGAGGTTTACACCTGCCAAGTGGAGCATCCAAGCATGATG  
AGCCCTCTACGGTGAATGGAGTGCACGGTCTGAATCTGCACAGAGCAAGATGCTGAGTGGAGTCGGGG  
GCTTTGTGCTGGCCTGCTCTTCTTGGACAGGGCTGTTTCATCTACTTCAGGAATCAGAAAGGACACTC  
TGGACTTCAGCCAACAGGACTCTTGAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC202743 protein sequence  
Red=Cloning site Green=Tags(s)

MVCLKLPGGSCMAALTVTLTVLSSPLALAGDTQPRFLEQAKCECHFLNGTERVWNLIRYIYNQEEYARYN  
 SDLGEYQAVTELGRPDAEYWNQKDLLERRRAEVDYCRYNYGVVESFTVQRRVQPKVTVPYPSKTQPLQH  
 HNLLVCSVNGFYPGSIEVRWFRNGQEEKAGVVSTGLIQNGDWFQTLVMLETVPRSGEVYTCQVEHPSMM  
 SPLTVQWSARSESAQSKMLSGVGGFVLGLLFLGTGLFIYFRNQKGHSLQPTGLLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6079\\_a06.zip](https://cdn.origene.com/chromatograms/mk6079_a06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_021983

**ORF Size:** 798 bp

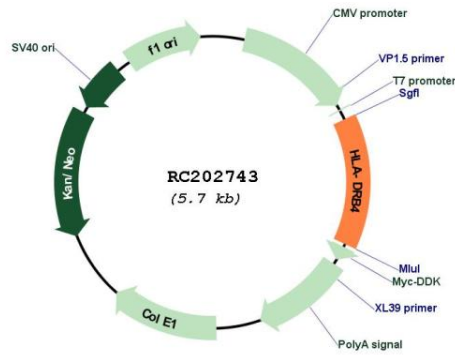
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

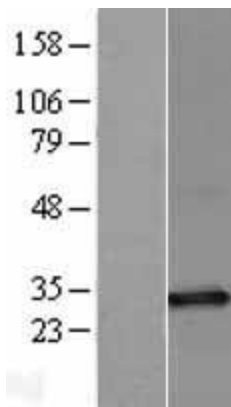
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_021983.4</a> , <a href="#">NP_068818.4</a>
<b>RefSeq Size:</b>	1193 bp
<b>RefSeq ORF:</b>	801 bp
<b>Locus ID:</b>	3126
<b>UniProt ID:</b>	<a href="#">P13762</a>
<b>Cytogenetics:</b>	6p21.3
<b>Domains:</b>	MHC_II_beta, ig, IGC1
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	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
<b>MW:</b>	29.9 kDa
<b>Gene Summary:</b>	HLA-DRB4 belongs to the HLA class II beta chain paralogues. This class II molecule is a 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]

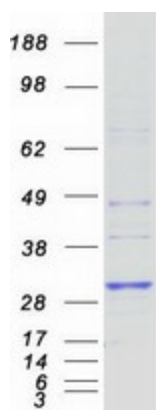
Product images:



Circular map for RC202743



Western blot validation of overexpression lysate (Cat# [LY402894]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202743 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HLA-DRB4 protein (Cat# [TP302743]). The protein was produced from HEK293T cells transfected with HLA-DRB4 cDNA clone (Cat# RC202743) using MegaTran 2.0 (Cat# [TT210002]).