

## Product datasheet for RC204511

### HLA (NM\_182549) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HLA (NM_182549) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HLA
Synonyms:	HLA-DQB1; HLA-DXB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204511 representing NM_182549 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCTTGAAGATGGCTCTGCAGATCCCTGGAGGCTTTTGGGCAGCAGCTGTGACCGTGATGCTGGTGA  
TGCTGAGCACCCAGTGGCTGAGGCCAGAGACTTCCCAAGATTTCTTGGTCCAGTTTAAGGGCATGTG  
CTACTTCACCAACGGGACAGAGCGGTGCGGGGTGGCCAGATACATCTATAACCGCGAGGAGTACGGG  
CGCTTCGACAGCGACGTTGGGGAGTCCAGGCGGTGACCGAGCTGGGGCGGAGCATCGAGGACTGGAACA  
ACTATAAGGACTTCTTGGAGCAGGAGCGGGCCGCGGTGGACAAGGTGTGCAGACACAACACGAGGCGGA  
GCTACGCACGACCTTGCAGCGGCAAGTGGAGCCCACAGTGACCATCTCCCATCCAGGACAGAGGCCCTC  
AACCACCAACCTGCTGGTCTGCTCAGTGACAGATTTCTATCCAGCCCAGATCAAAGTCCAGTGGTTTC  
GGAATGACCAGGAGGAGACAGCCGGTGTGTGTCCACCTCCCTCATTAGGAATGGTGACTGGACCTTCCA  
GATTCTGGTGATGCTGAAATAACTCCCCAGCGTGGAGACATCTACACCTGCCAAGTGGAGCACCCACGC  
CTCCAGAGCCCCATACCGTGGAGTGGCGACCTCGAGGGCCTCCACCTGCAGGACTCCTGCAC

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC204511 representing NM\_182549  
Red=Cloning site Green=Tags(s)

MSWKMALQIPGGFWAAAVTVMLVMLSTPVAEARDFPKDFLVQFKGMICYFTNGTERVIRGVARYIYNREEYGRFDSDVGEFQAVTELGRSIEDWNNYKDFLEQERAAVDKVCRRHNYEALRRTLQRQVEPTVTISPSRTEALNHHNLLVCSVTDFYPAQIKVQWFRNDQEETAGVSTSLIRNGDWFQILVMLEITPQRGDIYTCQVEHPSLQSPITVEWRPRGPPAAGLLH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6013\\_f09.zip](https://cdn.origene.com/chromatograms/mk6013_f09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_182549

**ORF Size:** 693 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).

**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:** [NM\\_182549.1](#), [NP\\_872355.1](#)

**RefSeq Size:** 1092 bp

**RefSeq ORF:** 695 bp

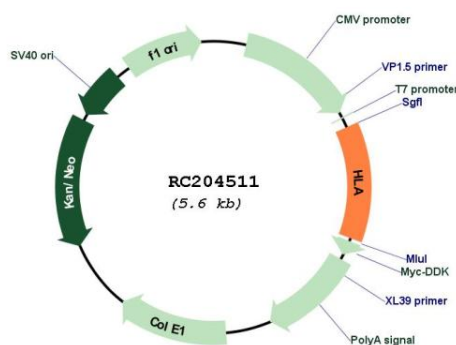
**Locus ID:** 3120

**Cytogenetics:** 6p21.32

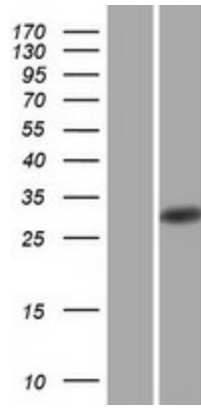
**MW:** 27 kDa

**Gene Summary:** HLA-DQB2 belongs to the family of HLA class II beta chain paralogs. Class II molecules are heterodimers consisting of an alpha (DQA) and a beta chain (DQB), both anchored in the membrane. They play 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). Polymorphisms in the alpha and beta chains specify the peptide binding specificity, and typing for these polymorphisms is routinely done for bone marrow transplantation. However this gene, HLA-DQB2, is not routinely typed, as it is not thought to have an effect on transplantation. There is conflicting evidence in the literature and public sequence databases for the protein-coding capacity of HLA-DQB2. Because there is evidence of transcription and an intact ORF, HLA-DQB2 is represented in Entrez Gene and in RefSeq as a protein-coding locus. [provided by RefSeq, Oct 2010]

### Product images:



Circular map for RC204511



Western blot validation of overexpression lysate (Cat# [LY403637]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204511 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HLA protein (Cat# [TP304511]). The protein was produced from HEK293T cells transfected with HLA cDNA clone (Cat# RC204511) using MegaTran 2.0 (Cat# [TT210002]).