

Product datasheet for RC231073

HLA-DQB2 (NM_001198858) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLA-DQB2 (NM_001198858) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HLA-DQB2
Synonyms:	DQB2; HLA-DQB1; HLA-DXB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC231073 representing NM_001198858 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCTCTGCAGATCCCTGGAGGCTTTTGGGCAGCAGCTGTGACCGTGATGCTGGTGATGCTGAGCACCC
 CAGTGGCTGAGGCCAGAGACTTTCCAAGGATTCTTGGTCCAGTTAAGGGCATGTGCTACTTCACCAA
 CGGGACAGAGCGCGTGCGCGGTGTGGCCAGATACATCTATAACCGCGAGGAGTACGGGCGCTTCGACAGC
 GACGTTGGGGAGTTCCAGGCGGTGACCGAGCTGGGGCGGAGCATCGAGGACTGGAACAATAAGGACT
 TCTTGAGCAGGAGCGGGCCGCGGTGGACAAGGTGTGACACACAACACGAGGCGGAGCTGCGCACGAC
 CTTGCAGCGGCAAGTGGAGCCACAGTGACCATCTCCCCATCCAGGACAGAGGCCCTCAACCACCACAAC
 CTGCTGGTCTGCTCGGTGACAGATTTCTATCCAGCCAGATCAAAGTCCGGTGGTTTCGGAATGACCAGG
 AGGAGACAGCCGGTGTGTGTCCACCTCCCTCATTAGGAATGGTGACTGGACCTTCAGATTCTGGTGAT
 GCTGGAATAACTCCCCAGCGTGGAGACATCTACACCTGCCAAGTGGAGCACCCAGCCTCCAGAGCCCC
 ATCACCGTGGAGTGGCGACCTCGAGGGCTCCACCAGCAGGACTCCTGCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC231073 representing NM_001198858
 Red=Cloning site Green=Tags(s)

MALQIPGGFWAAAVTVMLVMLSTPVAEARDFPKDFLVQFKGMCYFTNGTERVGVARYIYNREEYGRFDS
 DVGEFQAVTELGRSIEDWNNYKDFLEQERAAVDKVCRHNYEALRTTLQRQVEPTVTISPSRTEALNHHN
 LLVCSVTDFYPAQIKVRWFRNDQEETAGVVSTSLIRNGDWTQILVMLEITPQRGDIYTCQVEHPSLQSP
 ITVEWRPRGPPAPGLLH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1448_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001198858

ORF Size: 681 bp

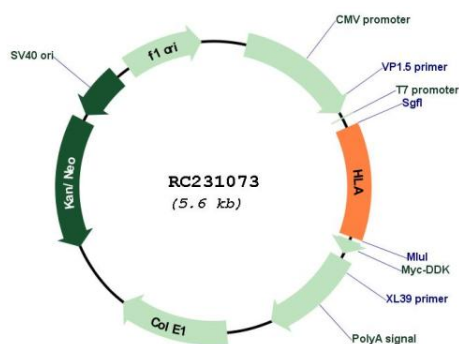
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

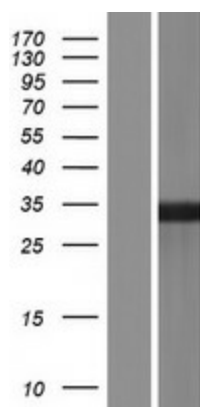
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001198858.2</u>
RefSeq ORF:	684 bp
Locus ID:	3120
UniProt ID:	<u>P05538</u>
Cytogenetics:	6p21.32
MW:	26.5 kDa
Gene Summary:	<p>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]</p>

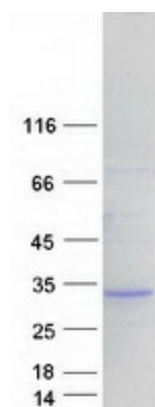
Product images:



Circular map for RC231073



Western blot validation of overexpression lysate (Cat# [LY434072]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231073 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HLA-DQB2 protein (Cat# [TP331073]). The protein was produced from HEK293T cells transfected with HLA-DQB2 cDNA clone (Cat# RC231073) using MegaTran 2.0 (Cat# [TT210002]).