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Product datasheet for SC118796

HLA-DQB1 (NM_002123) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLA-DQB1 (NM_002123) Human Untagged Clone
Tag:	Tag Free
Symbol:	HLA-DQB1
Synonyms:	CELIAC1; HLA-DQB; IDDM1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_002123, the custom clone sequence may differ by one or more nucleotides

ATGTCTTGGAAGAAGGCTTTGCGGATCCCCGGAGACCTTCGGGTAGCAACTGTCACCTTGATGCTGGCGA
TGCTGAGCTCCCTACTGGCTGAGGGCAGAGACTCTCCCGAGGATTTCGTGTTCCAGTTTAAGGGCATGTG
CTACTTCACCAACGGGACGGAGCGCGTGCGTCTTGTGACCAGATACATCTATAACCGAGAGGAGTACGCG
CGCTTCGACAGCGACGTGGGGGTGTACCGCGCGGTGACGCCGCAGGGGCGGCCTGATGCCGAGTACTGGA
ACAGCCAGAAGGAAGTCCTGGAGGGGACCCGGGCGGAGTTGGACACGGTGTGCAGACACAACTACGAGGT
GGCGTTCCGCGGGATCTTGCAGAGGAGAGTGGAGCCCACAGTGACCATCTCCCCATCCAGGACAGAGGCC
CTCAACCACCACAACCTGCTGGTCTGCTCGGTGACAGATTTCTATCCAGGCCAGATCAAAGTCCGGTGGT
TTCGGAATGATCAGGAGGAGACAGCCGGCGTTGTGTCCACCCCCCTTATTAGGAATGGTGACTGGACTTT
CCAGATCCTGGTGATGCTGGAAATGACTCCCCAGCGTGGAGATGTCTACACCTGCCACGTGGAGCACCCC
AGCCTCCAGAGCCCCATCACCGTGGAGTGGCGGGCTCAGTCTGAATCTGCCCAGAGCAAGATGCTGAGTG
GCGTTGGAGGCTTCGTGCTGGGGCTGATCTTCCTTGGGCTGGGCCTTATCATCCGTCAAAGGAGTCAGAA
AGGGCTTCTGCACTGA

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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002123 unedited
ACCTTGGATTTTGTACACGATTACTATAGGCGGCCGCGAATTCGGCACCAGGTATGACTA
CCACTACTTTTCCCTTCGTCTCATTATGTCTTGGAAGAAGTCTTTGCGGATCCCCGGAGA
CCTTCGGGTAGCAACTGTCACCTTGATGCTGGCGATCCTGAGCTCCTCACTGGCTGAGGG
CAGAGACTCTCCCGAGGATTTCGTGTACCAGTTTAAGGGCCTGTGCTACTTCACCAACGG
GACGGAGCGCGTGCGGGGTGTGACCAGACACATCTATAACCGAGAGGAGTACGTGCGCTT
CGACAGCGACGTGGGGGTGTACCGGGCAGTGACGCCGCAGGGGCGGCCTGTTGCCGAGTA
CTGGAACAGCCAGAAGGAAGTCCTGGAGGGGGCCCGGGCGTCGGTGGACAGGGTGTGCAG
ACACAACTACGAGGTGGCGTACCGCGGGATCCTGCAGAGGAGAGTGGAGCCCACAGTGAC
CATCTCCCCATCCAGGACAGAGGCCCTCAACCACCACAACCTGCTGATCTGCTCGGTGAC
AGATTTCTATCCAAGCCAGATCAAAGTCCGGTGGTTTCGGAATGATCAGGAGGAGACAGC
CGGCGTTGTGTCCACCCCCCTCATTAGGAACGGTGACTGGACCTTCCAGATCCTGGTGAT
GCTGGAAATGACTCCCCAGCGTGGAGATGTCTACACCTGCCACGTGGAGCACCCCAGCCT
CCAGAGCCCCATCACCGTGGAGTGGCGGGCTCAGTCTGAATCTGCCCAGATCAGATGCTG
AGTGGCGTTGGGAGCTTCGTGCTGGGGCTGATCTTCCTTGGGCTTGGNCCTATCATCCGT
CAAAGGAGTCGGANAGGGCTTCTGCACTGACTCCTGAGACTGTTTTAACTAAGACTGGNT
ATCACTCTNCTGTGATGCCTGCTGTCCCTG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002123 unedited
AAAGCTTGGAACGCGGCACGCATNCTAGNGATCGGTTTTTTTTTTTTTTTTTTTTTTTTA
ACTCAGGATCATGTTTAATTATGTAAAAAAGCTCTGAAGTCAGGTAATGTTTTTCATGTG
CTTCTCTTGAGCAGTCTGAGGAGAGAACAGAAACAGAATCCCCTTGGGGCCTGAGTAGAC
GCAGCTGGCCATGTACAGGCAGTGGCTCTGGGTCAGTGCAGGAAGCAGAGTCACAGCCAG
CGCCTTGGGGTGGGGATGAAAGGAGATGACCTGGTGGTTGCGTGACAGCCACTGTAGGAC
TTTGATCTCAGGGGGACAAGCTGACACAGGCAGCTGGGAATTCTGGGCAGGGACAAGCAG
GCATCACAGAAGAGTGATAACCAGTCTTAGTTAAAACAGTCTCAGGAGTCAGTGCAGAAG
CCCTTTCCGACTCCTTTGACGGATGATAAGGCCAAGCCCAAGGAAGATCAGCCCCAGCAC
GAAGCCTCCAACGCCACTCAGCATCTTGCTCTGGGCAGATTCAGACTGAGCCCGCCACTC
CACGGTGATGGGGCTCTGGAGGCTGGGGTGCTCCACGTGGCAGGTGTAAACATCTCCACG
CTGGGGAGTCATTTCCAGCATCACCAGGATCTGGAAGGTCCAGTCACCGTTCCTAATGAA
GGGGGTGGACACAACGCCGGCTGGCTCCTCCTGATCATTCCAAAACCCCCGGACTTTGAT
CTGGCCTGGATAGAAAATTGNCCCCGAGCAAAACANCAGGTGGGGGGGGTTGAAGGCCCT
TGTTCCTGGCGGGGAAAACGGCCCTTGGGGCTTCCTCTCTCCTTTGCAGAACCCCCTGAT
CCCCCCCTTTTTCTGCGGTTGCACCCCCTGCCCCAAAAGCCCGCGGCCCATCAGAACTGC
CTTTGCCCGTGCCANCCTCCGCAACGCGTTCCTCCCTCCCCTTTCTCTTTTCCCACACCC
CATA

Restriction Sites: NotI-NotI

ACCN: NM_002123

Insert Size: 1180 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_002123.2, NP_002114.2
RefSeq Size:	1190 bp
RefSeq ORF:	786 bp
Locus ID:	3119
UniProt ID:	P01920
Cytogenetics:	6p21.32
Domains:	MHC_II_beta, 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, Systemic lupus erythematosus, Type I diabetes mellitus, Viral myocarditis
Gene Summary:	HLA-DQB1 belongs to the HLA class II beta chain paralogs. This class II molecule is a heterodimer consisting of an alpha (DQA) and a beta chain (DQB), 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 (APC: B lymphocytes, dendritic cells, macrophages). The beta chain is approximately 26-28 kDa and it contains six exons. Exon 1 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 DQ molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to four different molecules. Typing for these polymorphisms is routinely done for bone marrow transplantation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2011] Transcript Variant: This variant (1) is the predominant transcript and encodes isoform 1. This transcript represents the DQB1*06:02:01:01 allele of the HLA-DQB1 gene, as represented in the assembled chromosome 6 in the primary assembly of the reference genome.