

Product datasheet for SC123658

HLA (BC012106) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: HLA (BC012106) Human Untagged Clone
Tag: Tag Free
Symbol: HLA
Synonyms: CELIAC1; HLA-DQB; IDDM1
Mammalian Cell Selection: None
Vector: pCMV6-XL5
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for BC012106 edited
 ATCCATCAGGTCCAAGCTGTGTTGACTACCACTACTTTTCCCTTCGTCTCAATTATGTCT
 TGAAGAAGGCTTTGCGGATCCCTGGAGGCCCTTCGGGTAGCAACTGTGACCTTGATGCTG
 GCGATGCTGAGCACCCCGTGGCTGAGGGCAGAGACTCTCCCAGGATTTTCGTGTACCAG
 TTTAAGGCATGTGCTACTTCACCAACGGGACGGAGCGCGTGCCTTGTGACCAGATAC
 ATCTATAACCGAGAGGAGTACGCACGCTTCGACAGCGACGTGGGGGTGTATCGGGCGGTG
 ACGCCGCTGGGGCCGCTGCCGCCGAGTACTGGAACAGCCAGAAGGAAGTCTGGAGAGG
 ACCCGGGCGGAGTTGGACACGGTGTGCAGACACAACCTACCAGTTGGAGCTCCGCACGACC
 TTGCAGCGCGAGTGGAGCCACAGTGACCATCTCCCATCCAGGACAGAGGCCCTCAAC
 CACCACAACCTGCTGGTCTGCTCAGTGACAGATTTCTATCCAGCCAGATCAAAGTCCGG
 TGGTTTCGGAATGACCAGGAGGAGACAACCTGGCGTTGTGTCCACCCCTTATTAGGAAC
 GGTGACTGGACCTTCCAGATCCTGGTGATGCTGGAATGACTCCCAGCGTGGAGACGTC
 TACACCTGCCACGTGGAGCACCCAGCCTCCAGAACCCCATCATCGTGGAGTGGCGGGCT
 CAGTCTGAATCTGCCAGAGCAAGATGCTGAGTGGCATTGGAGGCTTCGTGCTGGGGCTG
 ATCTTCTCGGGCTGGGCCTTATTATCCATCACAGGAGTCAGAAAGGGCTCCTGCACTGA
 CTCCTGAGACTATTTAACTGGGATTGGTTATCACTTTTCTGTAACGCCTGCTTGTCCCT
 GCCCAGAATCCCAGCTGCCTGTGTCAGCCTGTCCCCCTGAGATCAGAGTCTACAGTGG
 CTGTACGCAGCCACCAGGTCATCTCCTTTCATCCCCACCTCGAGGCTGATGGCTGTGAC
 CCTGCTTCTGCACTTACCCAGAGCCTCTGCCTGTGCACGGCCAGCTGCGTCTACTGAGG
 CCCCAGGGGTTTCTGTTTCTATTCTCTCCTCAGACTGCTCAAGAGAAGCACATGAAAAC
 CAAAAAAAAAAAAAAAAAAAA



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5' Read Nucleotide Sequence:	>OriGene 5' read for BC012106 unedited NATCTTTGGGTTTTGTAATACGACTTACTATAGGGCGGCACGCGAATTCGCACGAGGATC CATCAGGTCCAAGCTGTGTTGACTACCACTACTTTCCCTTCGTCTCAATTATGTCTTGG AAGAAGGCTTTGCGGATCCCTGGAGGCCTTCGGGTAGCAACTGTGACCTTGATGCTGGCG ATGCTGAGCACCCGGTGGCTGAGGGCAGAGACTCTCCGAGGATTTCTGTACCAAGTTT AAGGGCATGTGCTACTTCACCAACGGGACGGAGCGCGTGGCTTTGTGACCAGATACATC TATAACCGAGAGGAGTACGCACGCTTCGACAGCGACGTGGGGGTGTATCGGGCGGTGACG CCGCTGGGGCCGCTGCCGCCGAGTACTGGAACAGCCAGAAGGAAGTCCTGGAGAGGACC CGGGCGGAGTTGGACACGGTGTGCAGACACAACCTACCAGTTGGAGCTCCGCACGACCTTG CAGCGGGAGTGGAGCCACAGTGACCATCTCCCATCCAGGACAGAGGCCCTCAACCAC CACAACCTGCTGGTCTGCTCAGTGACAGATTTCTATCCAGCCAGATCAAAGTCCGGTGG TTTCCGAATGACCAGGAGGAGACAACCTGGCGTTGTGCCACCCCTTATTAGGAACGGT GACTGGACCTCCAGATCTGGTATGCTGGAAATGACTCCCGAGCGTGGAGACGCTAC ACCTGCCACGTGGAGCACCCAGCCTCCAGAACCCATCATCGTGGAGTGGCGGGCTCAG TCTGAATCTGCCAGAGCAGATGCTGAGTGGCATTGGAGGCTTCGTGCNTGGGCTGATCT TCCTCCGGCTGGNCTTATTATNCATCACAGGAGTCAGAAAGGGCTNCTGCACTGACTCC TG
Restriction Sites:	Please inquire
ACCN:	BC012106
Insert Size:	1160 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:	<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.
RefSeq:	BC012106.1 , AAH12106.1
RefSeq Size:	1160 bp
RefSeq ORF:	783 bp
Locus ID:	3119
Cytogenetics:	6p21.32
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]