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Product datasheet for SC126265

HLAC (HLA-C) (BC008457) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLAC (HLA-C) (BC008457) Human Untagged Clone
Tag:	Tag Free
Symbol:	HLAC
Synonyms:	D6S204; HLA-JY3; HLAC; HLC-C; PSORS1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene sequence for BC008457 edited
AGACGCCGAGATGCGGGTCATGGCGCCCCGAACCCTCATCCTGCTGCTCTCGGGAGCCCT
GGCCCTGACCGAGACCTGGGCCGGCTCCCACTCCATGAGGTATTTCTACACCGCTGTGTC
CCGGCCCGGCCGCGGGGAGCCCCACTTCATCGCAGTGGGCTACGTGGACGACACGCAGTT
CGTGCGGTTCGACAGCGACGCCGCGAGTCCGAGAGGGGAGCCGCGGGCGCCGTGGGTGGA
GCAGGAGGGGCCGGAGTATTGGGACCGGGAGACACAGAAGTACAAGCGCCAGGCACAGAC
TGACCGAGTGAGCCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCAGGTCTCA
CATCATCCAGAGGATGTATGGCTGCGACGTGGGGCCCGACGGGCGCCTCCTCCGCGGGTA
TGACCAGTACGCCTACGACGGCAAGGATTACATCGCCCTGAACGAGGATCTGCGCTCCTG
GACCGCCGCGGACACGGCGGCTCAGATCACCCAGCGCAAGTGGGAGGCGGCCCGTGAGGC
GGAGCAGCTGAGAGCCTACCTGGAGGGCCTGTGCGTGGAGTGGCTCCGCAGATACCTGAA
GAATGGGAAGGAGACGCTGCAGCGCGCGGAACACCCAAAGACACACGTGACCCACCATCC
CGTCTCTGACCATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGAT
CACACTGACCTGGCAGTGGGATGGGGAGGACCAAACTCAGGACACTGAGCTTGTGGAGAC
CAGGCCAGCAGGAGATGGAACCTTCCAGAAGTGGGCAGCTGTGGTGGTGCCTTCTGGAGA
AGAGCAGAGATACACGTGCCATGTGCAGCACGAGGGGCTGCCGGAGCCCCTCACCCTGAG
ATGGGAGCCGTCTTCCCAGCCCACCATCCCCATCGTGGGCATCGTTGCTGGCCTGGCTGT
CCTGGCTGTCCTAGCTGTCCTAGGAGCTGTGGTGGCTGTTGTGATGTGTAGGAGGAAGAG
CTCAGGGCATTTTCTTCCCACAGGTGGAAAAGGAGGGAGCTGCTCTCAGGCTGCGTCCAG
CAACAGTGCCCAGGGCTCTGATGAGTCTCTCATCGCTTGTAAAGCCTGAGACAGCTGCCT
GTGTGGGACTGAGATGCAGGATTTCTTCACACCTCTCCTTTGTGACTTCAAGAGCCTCTG
GCATCTCTTTCTGCAAAGGCATCTGAATGTGTCTGCGTTCCTGTTAGCATAATGTGAGGA
GGTGGACAGACAGCCCACCCCCGTGTCCACCGTGACCCCTGTCCCCACACTGACCTGTGT
TCCCTCCCCGATCATCTTTCCTGTTCCAGAGAAGTGGGCTGGATGTCTCCATCTCTGTCT
CAACTTCATGGTGCGCTGAGCTGCAACTTCTTACTTCCCTAATGAAGTTAGGAACCTGAA
TATAAATTTGTTTTCTCAAATATTTGCTATGAAGGGTTGATGGATTAATTAAATAAGTCA
ATTCCTGGAAGTTGAGAGAGCAAATAAAGACCTGAGAACTTTCCAAAAAAAAAAAAAAAA
AAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for BC008457 unedited
TCACGAATTTGTAATACGACTCACTATAGGCGGCGCGCGAATTCGCCATTACGGCCGGGG
AGACGCCCAGATGCGGGTCATGGGGCCCCGAACCCTCATCCTGCTGCTCTCGGGAGCCCT
GGCCCTGACCGAGACCTGGGCCGGCTCCCACTCCATGAGGTATTTCTACACCGCTGTGTC
CCGGCCCGGCCGCGGGGAGCCCCACTTCATCGCAGTGGGCTACGTGGACGACACGCAGTT
CGTGCGGTTCGACAGCGACGCCGCGAGTCCGAGAGGGGAGCCGCGGGCGCCGTGGGTGGA
GCANGAGGGGCCGGAGTATTGGGACCGGGAGACACAGAAGTACAAGCGCCAGGCACAGAC
TGACCGAGTGAGCCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCAGGTCTCA
CATCATCCAAAGGATGTATGGCTGCGACGTGGGGCCCGACGGGCGCCTCCTCCGCGGGTA
TGACCAGTACGCCTACCACGGCCAGGATTACATCGCCCTGAACGAGGATCTGCGCTCCTG
GACCGGCGCGGACACGGCGGCTCAGATCACCCAGCGCAAGTGGGAGGCGGCCCCTGAGGC
GGAGCANCTGAGAGCCTACCTGGAGGGCCTGTGCGTGGAGTGGCTCCCCANATACCTGAA
GAATGGGAAGGGGACCCTGCANCGCGCGGAGACACCCAAGGACACCCGTGACCCACCATC
CCGTCTTTGGACCATGAGGCCCCCCTGAGGGGGCTGGGCCTGGGGTTCTACCCGGGGGAG
ATCACCCTTAACTGGGAGAGGGGGTGGGGAGGACCAAACTCAGGGACGTGGCTTTTGGGG
AACCCCGCCCCCCGGGGGAGTGGGACCTTTCCAAAGTGGGGGACGTGGGGGGGTGCCCTT
CTGGGGAGGAGCAAAATAACCCTGGCCATGGTGGAGACAGGGGGGCGCCGCGGACCCCTT
CACCTGGAAGAGGGGCCGCCT

Restriction Sites: Please inquire

ACCN: BC008457

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:	BC008457.1, AAH08457.1
RefSeq Size:	1574 bp
Locus ID:	3107
Cytogenetics:	6p21.33
Protein Families:	Secreted Protein, Transmembrane
Protein Pathways:	Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, Natural killer cell mediated cytotoxicity, Type I diabetes mellitus, Viral myocarditis
Gene Summary:	HLA-C belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. Class I molecules play a central role in the immune system by presenting peptides derived from endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domain, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region, and exons 6 and 7 encode the cytoplasmic tail. Polymorphisms within exon 2 and exon 3 are responsible for the peptide binding specificity of each class one molecule. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. About 6000 HLA-C alleles have been described. The HLA system plays an important role in the occurrence and outcome of infectious diseases, including those caused by the malaria parasite, the human immunodeficiency virus (HIV), and the severe acute respiratory syndrome coronavirus (SARS-CoV). The structural spike and the nucleocapsid proteins of the novel coronavirus SARS-CoV-2, which causes coronavirus disease 2019 (COVID-19), are reported to contain multiple Class I epitopes with predicted HLA restrictions. Individual HLA genetic variation may help explain different immune responses to a virus across a population.[provided by RefSeq, Aug 2020]