

Product datasheet for SC206130

HLAA (HLA-A) (NM_002116) Human 3' UTR Clone

Product data:

Product Type:	3' UTR Clones
Product Name:	HLAA (HLA-A) (NM_002116) Human 3' UTR Clone
Symbol:	HLAA
Synonyms:	HLAA
Mammalian Cell Selection:	Neomycin
Vector:	pMirTarget (PS100062)
ACCN:	NM_002116
Insert Size:	445 bp
Insert Sequence:	>SC206130 3'UTR clone of NM_002116 The sequence shown below is from the reference sequence of NM_002116. The complete sequence of this clone may contain minor differences, such as SNPs. Blue =Stop Codon Red =Cloning site

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GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
GATGTGTCCTCACAGCTTGAAAGTGTGAGACAGCTGCCTTGTGTGGGACTGAGAGGCAAGAGTTGTT
CCTGCCCTCCCTTTGTGACTTGAAGACCCTGACTTTGTTTCTGCAAAGGCACCTGCATGTGTCTGTG
TTCGTGTAGGCATAATGTGAGGAGGTGGGAGACCACCCACCCCATGTCCACCATGACCTCTTCCC
ACGCTGACCTGTGCTCCCTCCCCAATCATCTTTCCTGTTCCAGAGAGGTGGGGCTGAGGTGTCTCCATC
TCTGTCTCAACTTCATGGTGCACCTGAGCTGTAACCTTCTTCCCTATTAAAATTAGAACCTTAGTAT
AAATTTACTTTCTCAAATTTCCATGAGAGGTTGATGAGTTAATTAAGGAGAAGATTCTAAAATT
TGAGAGACAAAATAAATGGAAGACATGAGAA
ACGCGTAAGCGGCCGCGGCATCTAGATTGAAGAAAATGACCGACCAAGCGACGCCAACCTGCCATCA
CGAGATTCGATTCCACCGCCGCTTCTATGAAAGG
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Restriction Sites:	Sgfl-MluI
OTI Disclaimer:	Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences, e.g., single nucleotide polymorphisms (SNPs).
Components:	The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.



RefSeq: [NM_002116.8](#)

Summary: HLA-A 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 the endoplasmic reticulum lumen so that they can be recognized by cytotoxic T cells. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon 1 encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domains, 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. More than 6000 HLA-A 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]

Locus ID: 3105

MW: 16.8