

Product datasheet for **SC324555**

HLAE (HLA-E) (NM_005516) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLAE (HLA-E) (NM_005516) Human Untagged Clone
Tag:	Tag Free
Symbol:	HLAE
Synonyms:	HLA-6.2; QA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene sequence for NM_005516.4
 AGGACTCAGAGGCTGGGATCATGGTAGATGGAACCCCTCCTTTACTCCTCTCGGAGGCC
 TGGCCCTTACCCAGACCTGGGCGGGCTCCCACTCCTTGAAGTATTTCCACACTTCCGTGT
 CCCGGCCCGCGCGGGGAGCCCGCTTCATCTCTGTGGGCTACGTGGACGACACCCAGT
 TCGTGCGCTTCGACAACGACGCCGCGAGTCCGAGGATGGTGCCGCGGGCGCCGTGGATGG
 AGCAGGAGGGGTACAGTATTGGGACCGGAGACACGGAGCGCCAGGGACACCCGACAGA
 TTTTCCGAGTGAACCTGCGGACGCTGCGCGGCTACTACAATCAGAGCGAGGCCGGTCTC
 ACACCCTGCAGTGGATGCATGGCTGCGAGCTGGGGCCCGACGGGCGCTTCTCCGCGGT
 ATGAACAGTTCGCCTACGACGGCAAGGATTATCTCACCCCTGAATGAGGACCTGCGCTCCT
 GGACCGCGGTGGACACGGCGGCTCAGATCTCCGAGCAAAAGTCAAATGATGCCTCTGAGG
 CGGAGCACAGAGAGCCTACCTGGAAGACACATGCGTGGAGTGGTCCACAAATACCTGG
 AGAAGGGAAAGGAGACGCTGCTTACCTGGAGCCCCAAAGACACACGTGACTCACCACC
 CCATCTCTGACCATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCCTGCGGAGA
 TCACACTGACCTGGCAGCAGGATGGGGAGGGCCATACCCAGGACACGGAGCTCGTGGAGA
 CCAGGCCCTGCAGGGGATGGAACCTTCCAGAAGTGGGACGCTGTGGTGGTGCCTTCTGGAG
 AGGAGCAGAGATACACGTGCCATGTGCAGCATGAGGGGCTACCCGAGCCGTCACCTGA
 GATGGAAGCCGGCTTCCAGCCCACCATCCCCATCGTGGGCATCATTGCTGGCCTGGTTC
 TCCTTGGATCTGTGGTCTCTGGAGCTGTGGTTGCTGCTGTGATATGGAGGAAGAAGAGCT
 CAGGTGAAAAGGAGGGAGCTACTCTAAGGCTGAGTGGAGCGACAGTGCCAGGGGTCTG
 AGTCTCACAGCTTGTAAAGCCTGAGACAGCTGCCTTGTGTGCGACTGAGATGCACAGCTG
 CCTTGTGTGCGACTGAGATGCAGATTTCTCACGCCCTCCCTATGTGTCTTAGGGGACT
 CTGGCTTCTCTTTTGAAGGGCCTCTGAATCTGTCTGTGTCCCTGTTAGCACAATGTGA
 GGAGGTAGAGAAACAGTCCACCTCTGTGTCTACCATGACCCCTTCTCACACTGACCTG
 TGTTCCTCCCTGTTCTTTTCTATTAATAAATAAGAACCTGGGACAGAGTGGCGCAGCTC
 ATGCCTGTAATCCAGCACTTAGGGAGGCCGAGGAGGCAGATCACGAGGTCAGGAGATC
 GAAACCATCCTGGCTAACACGGTAAACCCCGTCTCTACTAAAAAATACAAAAAATTAGC
 TGGGCGCAGAGGCACGGGCTGTAGTCCCAGCTACTCAGGAGGCGGAGGCAGGAGAATGG
 CGTCAACCCGGGAGGCGGAGGTTGCAGTGAAGCAGGATTGTGCGACTGCACTCCAGCCTG
 GGTGACAGGTGAAACGCCATCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

- Restriction Sites:** Please inquire
- ACCN:** NM_005516
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_005516.4](#), [NP_005507.3](#)

RefSeq Size: 1701 bp

RefSeq ORF: 1077 bp

Locus ID: 3133

UniProt ID: [P13747](#)

Cytogenetics: 6p22.1

Domains: MHC_I, ig, IGc1

Protein Families: 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-E 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. HLA-E binds a restricted subset of peptides derived from the leader peptides of other class I molecules. 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 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. [provided by RefSeq, Jul 2008]