

Product datasheet for **RG205939**

HLAE (HLA-E) (NM_005516) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLAE (HLA-E) (NM_005516) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HLAE
Synonyms:	HLA-6.2; QA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205939 representing NM_005516 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTAGATGGAACCCTCCTTTTACTCCTCTCGGAGGCCCTGGCCCTTACCCAGACCTGGGCGGGCTCCC
ACTCCTTGAAGTATTTCCACACTTCCGTGTCCCGGCCCGCCGCGGGGAGCCCGCTTCATCTCTGTGGG
CTACGTGGACGACACCCAGTTCGTGCGCTTCGACAACGACGCCGCGAGTCCGAGGATGGTCCCGGGCG
CCGTGGATGGAGCAGGAGGGTCTAGAGTATTGGGACCGGAGACACGGAGCGCCAGGGACACCGCACAGA
TTTTCCGAGTGAACCTGCGGACGCTGCGGGCTACTACAATCAGAGCGAGCCGGTCTCACACCCTGCA
GTGGATGCATGGCTGCGAGCTGGGGCCGACGGGCGCTTCTCCGCGGGTATGAACAGTTCGCCTACGAC
GGCAAGGATTATCTCACCTGAATGAGGACCTGCGCTCCTGGACCGCGGTGGACACGGCGGCTCAGATCT
CCGAGCAAAAGTCAAATGATGCCTCTGAGGCGGAGCACCAGAGAGCCTACCTGGAAGACACATGCCTGGA
GTGGCTCCACAAATACCTGGAGAAGGGGAGGAGACGCTGCTTACCTGGAGCCCCAAAGACACACGCTG
ACTCACCCCATCTCTGACCATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGA
TCACACTGACCTGGCAGCAGGATGGGGAGGGCCATACCCAGGACACGGAGCTCGTGGAGACCAGGCTGC
AGGGATGGAACCTTCCAGAAGTGGCAGCTGTGGTGGTGCCTTCTGGAGAGGAGCAGAGATACACGTGC
CATGTGCAGCATGAGGGCTACCCGAGCCCGTACCCTGAGATGGAAGCCGGCTTCCAGCCCACCATCC
CCATCGTGGGCATCATTGCTGGCCTGGTTCCTTGGATCTGTGGTCTCTGGAGCTGTGGTTGCTGCTGT
GATATGGAGGAAGAAGAGCTCAGGTGAAAAGGAGGGAGCTACTTAAGGCTGAGTGGAGCGACAGTGCC
CAGGGTCTGAGTCTCACAGCTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205939 representing NM_005516
 Red=Cloning site Green=Tags(s)

MVDGTL L L L L L S E A L A L T Q T W A G S H S L K Y F H T S V S R P G R G E P R F I S V G Y V D D T Q F V R F D N D A A S P R M V P R A
 P W M E Q E G S E Y W D R E T R S A R D T A Q I F R V N L R T L R G Y Y N Q S E A G S H T L Q W M H G C E L G P D G R F L R G Y E Q F A Y D
 G K D Y L T L N E D L R S W T A V D T A A Q I S E Q K S N D A S E A E H Q R A Y L E D T C V E W L H K Y L E K G K E T L L H L E P P K T H V
 T H H P I S D H E A T L R C W A L G F Y P A E I T L T W Q Q D G E G H T Q D T E L V E T R P A G D G T F Q K W A A V V P S G E E Q R Y T C
 H V Q H E G L P E P V T L R W K P A S Q P T I P I V G I I A G L V L L G S V V S G A V V A A V I W R K K S S G G K G G S Y S K A E W S D S A
 Q G S E S H S L

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005516

ORF Size: 1074 bp

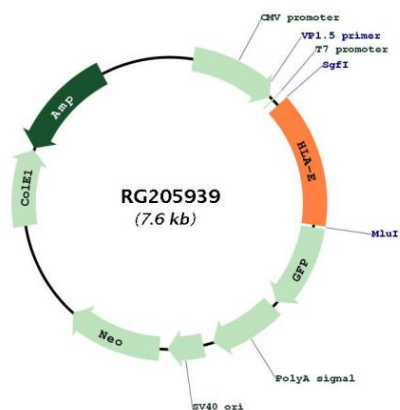
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	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]

Product images:



Circular map for RG205939