

Product datasheet for **SC127080**

HLAF (HLA-F) (NM_018950) Human Untagged Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | HLAF (HLA-F) (NM_018950) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | HLAF |
| Synonyms: | CDA12; HLA-5.4; HLA-CDA12; HLAF |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >NCBI ORF sequence for NM_018950, the custom clone sequence may differ by one or more nucleotides |

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ATGGCGCCCCGAAGCCTCCTCCTGCTGCTCTCAGGGGCCCTGGCCCTGACCGATACTTGGCGGGCTCCC  
ACTCCTTGAGGTATTTACAGCACCCTGTGTGCGGGCCCGCCGCGGGGAGCCCCGCTACATCGCCGTGGA  
GTACGTAGACGACACGCAATTCCTGCGGTTGACAGCGACGCCGCGATTCCGAGGATGGAGCCGCGGGAG  
CCGTGGGTGGAGCAAGAGGGGCCGAGTATTGGGAGTGGACCACAGGGTACGCCAAGGCCAACGCACAGA  
CTGACCGAGTGGCCCTGAGGAACCTGCTCCGCCCTACAACCAGAGCGAGGCTGGGTCTCACACCCTCCA  
GGGAATGAATGGCTGCGACATGGGGCCCGACGGACGCTCCTCCGCGGTATCACCAGCAGCGTACGAC  
GGCAAGGATTACATCTCCCTGAACGAGGACCTGCGCTCCTGGACCGGGCGGACACCGTGGCTCAGATCA  
CCCAGCGCTTCTATGAGGCAGAGGAATATGCAGAGGAGTTCAGGACCTACCTGGAGGGCGAGTGCCTGGA  
GTTGCTCCGCAGATACTTGGAGAATGGGAAGGAGACGCTACAGCGCGCAGATCCTCCAAAGGCACACGTT  
GCCCACCACCCCATCTCTGACCATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGA  
TCACGCTGACCTGGCAGCGGATGGGGAGGAACAGACCAGGACACAGAGCTTGTGGAGACCAGGCTGC  
AGGGATGGAACCTCCAGAAGTGGGCCGCTGTGGTGGTCCCTCCTGGAGAGGAACAGAGATACACATGC  
CATGTGCAGCACGAGGGGCTGCCCCAGCCCTCATCCTGAGATGGGAGCAGTCTCCCAGCCCACCATCC  
CCATCGTGGGCATCGTTGCTGGCCTTGTGTCTTGGAGCTGTGGTCACTGGAGCTGTGGTGCCTGCTGT  
GATGTGGAGGAAGAAGAGCTCAGATAGAAACAGAGGGAGCTACTCTCAGGCTGCAGTGTGA
```



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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_018950 unedited
GTCAACTTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGCACGAGGTCATGGCGC
CCCGAAGCCTCCTCTGCTGCTCTCAGGGCCCTGGCCCTGACCGATACTTGGGCGGGCTC
CCTACTCCTTGAGGTATTTTCAGCACCGCTGTGTGCGGGCCCGCCGCGGGAGCCCCGCTA
CATCGCGTGGAGTACGTAGACGACACGCAATTCCTGCGGTTTCGACAGCGACGCCCGAT
TCCGAGGATGGAGCCGCGGGAGCCGTGGGTGGAGCAAGAGGGGCCGAGTATTGGGAGTG
GACCACAGGGTACGCCAAGGCCAACGCACAGACTGACCGAGTGGCCCTGAGGAACCTGCT
CGGCCGCTACAACAGAGCGAGGCTGGGTCTCACACCCTCCAGGGAATGAATGGCTGCGA
CATGGGGCCCGACGGACGCCCTCCTCCGCGGGTATCACCAGCACGCGTACGACGGCAAGGA
TTACATCTCCCTGAACGAGGACCTGCGCTCCTGGACCGCGGGACACCGTGGCTCAGAT
CACCCAGCGCTTCTATGAGGCAGAGGAATATGCAGAGGAGTTCAGGACCTACCTGGAGGG
CGAGTGCCTGGAGTTGCTCCGAGATACTTGGAGAATGGGAAGGAGACGCTACAGCGCGC
AGATCCTCAAAGGCACACGTTGCCACCACCCATCTCTGACCATGAGGCCACCCTGAG
GTGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACGCTGACCTGGCAGCGGGATGGGGA
GGAACAGACCCAGACACAGAGCTTGTGGAGACCAGGCTGCAGGGGATGGAACCTTCCA
GAATGGGCCGCTGTGGTGGTGGCTTCTGGAGAGGACAGAGATCACTGCCTGTGCACACGA
GGGCTGCCAGCCCTATNCTGGATGGGACAGTCTCCAGCCACATCCCATGTGGGCTTGT
```

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_018950 unedited
CGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTCTATAAAAAGAAATTTTTTATTCTT
TATTTTTAAAATTTATGTATGTTCTGTGAGGCACAAGTGAATTCCTGCTACATTGATACCT
TGCTTCTCAGTCCCACACAAGGAAGCTGTCTCACACTGCAGCCTGAGAGTAGCTCCCTCT
GTTTCTATCTGAGCTCTTCTTCCCTCCACATCACAGCAGCGACCACAGCTCCAGTGACCAC
AGCTCCAAGGACAACAAGGCCAGCAACGATGCCACGATGGGGATGGTGGGCTGGGGAGA
CTGCTCCCATCTCAGGATGAGGGCTGGGGCAGCCCTCGTGCTGCACATGGCATGTGTA
TCTCTGTTCTCTCCAGAAGGCACCACCACAGCGGCCACTTCTGGAAGGTTCCATCCCC
TGCAGGCCTGGTCTCCACAAGCTCTGTGCTCCTGAGTCTGTTCCCTCCCATCCCGTGCCA
GGTCAGCGTGATCTCCGCAAGGTAGAAGCCAGGGCCAGCACCTCAAGGTGGCCTCATG
GTCAGAGATGGGGTGGTGGGCAACGTGTGCCCTTGAGGATCTGCGCGCTGTAACGCTCC
CTTCCATTCTCCAAGTATCTGCGGAGCAACTCCAGGCACTCGCCCTCCAGTAAGTCTGA
ACTCCTCTGCTTATTTCTCTGCCTCATAGAAACCCTGGTGATCTGAGCCACGGTGTCCG
CCGCGGTCCAGGAGCGCAGTCTCTCGTCAAGGAATGTATCCTTGCCGCGTACCGTGTGTG
ATACCCCGAGGAGCGTTCTGTGGGCCATGTGCACCATCTCCCTGGAGGTGGAACCAC
CCCCTTCTGTTGTACCGCGGACAGTTCTAGGCCCTCGGACATTGGCGTGGCCTTCGTAC
CTGGGGCCCTCCAATGGGCCCTTGGCTCCACAGTTCGGTTCCTTCGGATCGCGGTGG
```

Restriction Sites:

NotI-NotI

ACCN:

NM_018950

Insert Size:

1140 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_018950.1](#), [NP_061823.1](#)

RefSeq Size: 1188 bp

RefSeq ORF: 1089 bp

Locus ID: 3134

UniProt ID: [P30511](#)

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, Type I diabetes mellitus, Viral myocarditis

Gene Summary:

This gene belongs to the HLA class I heavy chain paralogues. It encodes a non-classical heavy chain that forms a heterodimer with a beta-2 microglobulin light chain, with the heavy chain anchored in the membrane. Unlike most other HLA heavy chains, this molecule is localized in the endoplasmic reticulum and Golgi apparatus, with a small amount present at the cell surface in some cell types. It contains a divergent peptide-binding groove, and is thought to bind a restricted subset of peptides for immune presentation. This gene exhibits few polymorphisms. Multiple transcript variants encoding different isoforms have been found for this gene. These variants lack a coding exon found in transcripts from other HLA paralogues due to an altered splice acceptor site, resulting in a shorter cytoplasmic domain. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) uses an alternate 3' exon, compared to variant 1. The resulting isoform (2) has a shorter and distinct C-terminus, compared to isoform 1.