

## Product datasheet for **RG213005**

### HLAF (HLA-F) (NM\_001098478) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HLAF (HLA-F) (NM\_001098478) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** HLA-F  
**Synonyms:** CDA12; HLA-5.4; HLA-CDA12; HLAF  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG213005 representing NM\_001098478  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCCCCGAAGCCTCCTCCTGCTGCTCTCAGGGGCCCTGGCCCTGACCGATACTTGGGCGGGCTCCC  
ACTCCTTGAGGTATTTTCAGCACCGCTGTGTCGCGGCCCGGCCGCGGGGAGCCCCGCTACATCGCCGTGGA  
GTACGTAGACGACACGCAATTCCTGCGGTTTCGACAGCGACGCCGCGATTCCGAGGATGGAGCCGCGGGAG  
CCGTGGGTGGAGCAAGAGGGGCCGAGTATTGGGAGTGGACCACAGGGTACGCCAAGGCCAACGCACAGA  
CTGACCGAGTGGCCCTGAGGAACCTGCTCCGCCGCTACAACCAGAGCGAGGCTGGGTCTCACACCCTCCA  
GGGAATGAATGGCTGCGACATGGGGCCGACGGACGCTCCTCCGCGGGTATCACCAGCACGCGTACGAC  
GGCAAGGATTACATCTCCCTGAACGAGGACCTGCGCTCCTGGACCGCGCGGACACCGTGGCTCAGATCA  
CCCAGCGTTCTATGAGGCAGAGGAATATGAGAGGAGTTCAGGACCTACCTGGAGGGCGAGTGCCTGGA  
GTTGCTCCGAGATACTTGGAGAATGGGAAGGAGACGCTACAGCGCGCAGAGCAGTCTCCCCAGCCCACC  
ATCCCCATCGTGGGCATCGTTGCTGGCCTTGTGTCTTGGAGCTGTGGTCACTGGAGCTGTGGTGCCTG  
CTGTGATGTGGAGGAAGAAGAGCTCAGATAGAAACAGAGGGAGCTACTCTCAGGCTGCAGTG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

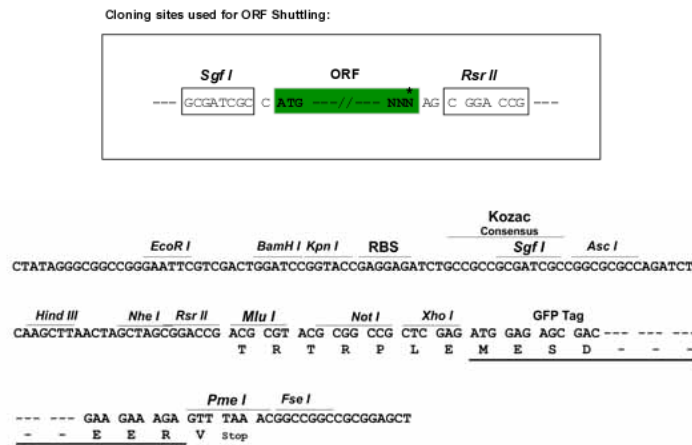
**Protein Sequence:** >RG213005 representing NM\_001098478  
Red=Cloning site Green=Tags(s)

MAPRSLLLLLSGALALTDTWAGSHSLRYFSTAVSRPGRGEPRIYAVEYVDDTQFLRFDSDAAIIPRMEPRE  
 PWVEQEGPQYWEWTTGYAKANAQTDRVALRNLLRRYNQSEAGSHTLQGMNGCDMGPDRLLRQYHQHAYD  
 GKDYISLNEDLRSWTAADTVAQITQRFYEAEEYAEFRTYLEGECLELLRRYLENGKETLQRAEQSPQPT  
 IPIVGIVAGLVVLGAVVTGAVVAAMWRKKSSDRNRGSYSQAAV

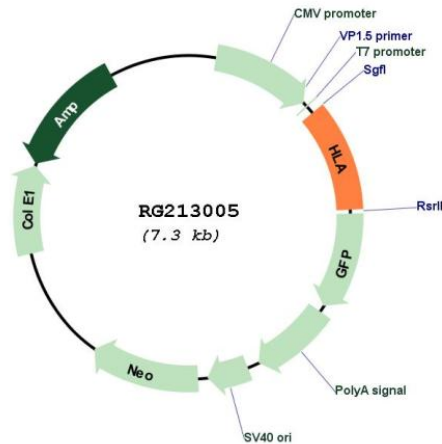
SGPTRRRLE - GFP Tag - V

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001098478

**ORF Size:** 762 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](mailto: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](#)

**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:**

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\\_001098478.2](#)

**RefSeq Size:** 1025 bp

**RefSeq ORF:** 765 bp

**Locus ID:** 3134

**UniProt ID:** [P30511](#)

**Cytogenetics:** 6p22.1

**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]