

## Product datasheet for **RG212120**

### HLAF (HLA-F) (NM\_001098479) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HLAF (HLA-F) (NM_001098479) 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:	>RG212120 representing NM_001098479 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCCCCGAAGCCTCCTCCTGCTGCTCTCAGGGGCCCTGGCCCTGACCGATACTTGGCGGGCTCCC  
ACTCCTTGAGGTATTTACGACCCGCTGTGTGCGGCCCGGCCGCGGGGAGCCCCGCTACATCGCCGTGGA  
GTACGTAGACGACACGCAATTCCTGCGTTTCGACAGCGACGCCGCGATTCCGAGGATGGAGCCGCGGGAG  
CCGTGGGTGGAGCAAGAGGGGCCGAGTATTGGGAGTGGACCACAGGGTACGCCAAGGCCAACGCACAGA  
CTGACCGAGTGGCCCTGAGGAACCTGCTCCGCCCTACAACCAGAGCGAGGCTGGGTCTCACACCCTCCA  
GGGAATGAATGGCTGCGACATGGGGCCCGACGGACGCCTCCTCCGCGGGTATCACCAGCAGCGTACGAC  
GGCAAGGATTACATCTCCCTGAACGAGGACCTGCGCTCCTGGACCAGCGCGGACACCGTGGCTCAGATCA  
CCCAGCGCTTCTATGAGGCAGAGGAATATGACAGGAGTTCAGGACCTACCTGGAGGGCGAGTGCCTGGA  
GTTGCTCCGAGATACTTGGAGAATGGGAAGGAGACGCTACAGCGCGCAGATCCTCCAAAGGCACACGTT  
GCCACCACCCCATCTCTGACCATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGA  
TCACGCTGACCTGGCAGCGGATGGGGAGGAACAGACCCAGGACACAGAGCTTGTGGAGACCAGGCTGC  
AGGGATGGAACCTTCCAGAAGTGGGCCGCTGTGGTGGTGCCTCCTGGAGAGAACAGAGATACACATGC  
CATGTGCAGCAGAGGGGCTGCCAGCCCTCATCCTGAGATGGGAGCAGTCTCCCAGCCACCATCC  
CCATCGTGGGCATCGTTGCTGGCCTTGTGTCTTGGAGCTGTGGTCACTGGAGCTGTGGTGCCTGCTGT  
GATGTGGAGGAAGAAGAGCTCAGATAGAAACAGAGGGAGTACTCTCAGGCTGCAGCCTACTCAGTGGTC  
AGCGGAAACTTGATGATAACATGGTGGTCAAGCTTATTCTCCTGGGGTGTCTTCCAAGGATATTTGG  
GCTGCCTCCGAGTCACAGTGTCTTGGGCCCGGAAGGTGGGTGACATGTGGATCTTGTTTTTTTGTG  
GCTGTGGACATCTTCAACTGCCTTCTTGGCCTTCAAAGCCTTCGTTTGGCTTCGGCTTAGGAGG  
GGCAGGAGCTTCTTCTCGTTCTTGGCACCATCTTATGAAAAGGTCCAGATTAAGATTTTTGAC

AGCGGACCGACGCTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG212120 representing NM\_001098479  
 Red=Cloning site Green=Tags(s)

MAPRSLLLLLSGALALTDTWAGSHSLRYFSTAVSRPGRGEPRIYAVEYVDDTQFLRFDSDAAI PRMEPRE  
 PWVEQEGPQYWEWTTGYAKANAQTDRVALRNLLRRYNQSEAGSHTLQGMNGCDMGPDRLLRQYHQHAYD  
 GKDYISLNEDLRSWTAADTVAQITQRFYAE EYAE EFRTYLEGECELLRRYLENGKETLQRADPPKAHV  
 AHHPISDHEATLRCWALGFYPAEITLTWQRDGEEQTQDTELVETRPAGDGTFFQKWA AVVPPGEEQRYTC  
 HVQHEGLPQPLILRWEQSPQPTIPVIGIVAGLVVLGAVVTGAVVA VMWRKKS SDRNRGYSYQAAA YSVV  
 SGNLMITWSSLFLLGVLFGQYLGLRSHSVLGRRKVGDMWILFFLWLWTSFNTAFLALQSLRF GFGFRR  
 GRSFLLRSWHMLMKRVQIKIFD

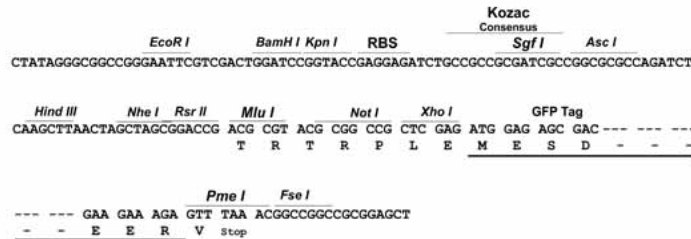
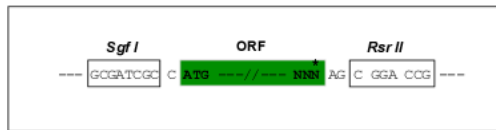
SGP TRRRLE - GFP Tag - V

**Restriction Sites:**

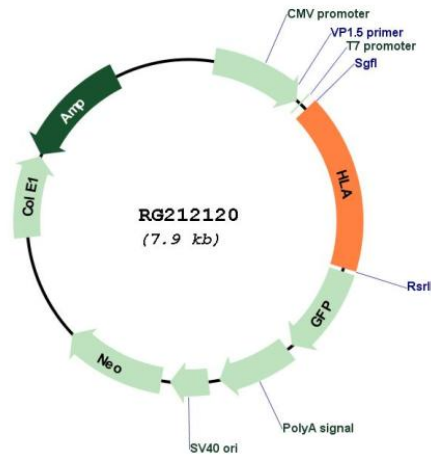
SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:**

NM\_001098479

<b>ORF Size:</b>	1326 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001098479.2</a>
<b>RefSeq Size:</b>	1591 bp
<b>RefSeq ORF:</b>	1329 bp
<b>Locus ID:</b>	3134
<b>UniProt ID:</b>	<a href="#">P30511</a>
<b>Cytogenetics:</b>	6p22.1
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, Type I diabetes mellitus, Viral myocarditis
<b>Gene Summary:</b>	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]