

Product datasheet for **RG229011**

HIV TAT specific factor 1 (HTATSF1) (NM_001163280) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HIV TAT specific factor 1 (HTATSF1) (NM_001163280) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HTATSF1
Synonyms:	dj196E23.2; TAT-SF1; TATSF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG229011 ORF sequence, **codon optimized**.
Due to the complexity of NM_001163280, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCCGGGACAAACCTGGACGGGAACGACGAGTTTGACGAGCAACTGCGAATGCAGGAGCTGTATGGCG
 ATGGGAAAGACGGTGACACACAGACCGATGCAGGCGGCGAGCCAGATTCTCTGGGCAACAGCCAACAGA
 CACCCCATACGAATGGGACCTCGACAAGAAGGCCTGGTTCCAAAGATTACAGAGGACTTTATCGCCACA
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 GAAGATACCTATGAGAAAGTGTTCGACGACGAAAGTATGAGAAGGAGGATGAGGAATATGCGGACGAAA
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 CGACAAAAGAAGATGAAGATGCTGATGGGAAAGAGGTAGAGGATGCTGATGAAAAGCTCTTCGAAGATGAC
 GATTCAAACGAGAAAAGTGTGATGAAGAGGAAGACAGTAGCGAAAAACTGTTTCGACGATAGCGATGAGA
 GAGGCACATTGGGCGGATTTGGTCAAGTGAAGAGGGCCCTCTCTACTGGGTCTAGCTTCATTCTGAG
 CTCTGATGATGATGACGACGATATC

ACCGGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG229011 representing NM_001163280
 Red=Cloning site Green=Tags(s)

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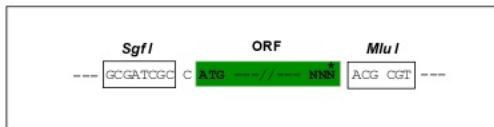
MSGTNLDGNDEFDEQLRMQEL YDGDGKGDGTQTDAGGEPDSL GQQPTDTPYEWDL DKKAWFPKITEDFIAT
YQANYGF SNDGASSTANVEDVHARTAEPPQEKAPEPTDARKKGEKRKAESGWFHVEEDRNTNVYV SGL
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VRGSEEDSPKESKKT LKNDCEENLAKE SEDDLNKESEEEVGP TKESEEDDSEKESDEDCSEKQSE DG
SEREFEENLEKDLDEEGSEKELHENVLDKELEENDSENSEFEDDGSEKVLDEEGSEREFDEDSDEKEEE
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TRTRPLE - GFP Tag - V

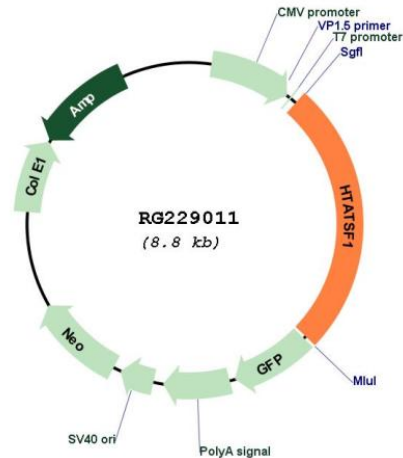
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001163280

ORF Size: 2265 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:

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_001163280.1](#), [NP_001156752.1](#)

RefSeq Size: 3037 bp

RefSeq ORF: 2268 bp

Locus ID: 27336

UniProt ID: [O43719](#)

Cytogenetics: Xq26.3

Protein Families: Transcription Factors

Gene Summary: The protein encoded by this gene functions as a cofactor for the stimulation of transcriptional elongation by HIV-1 Tat, which binds to the HIV-1 promoter through Tat-TAR interaction. This protein may also serve as a dual-function factor to couple transcription and splicing and to facilitate their reciprocal activation. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Sep 2009]