

Product datasheet for **RG208018**

UPF1 (NM_002911) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UPF1 (NM_002911) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	UPF1
Synonyms:	HUPF1; NORF1; pNORF1; RENT1; smg-2; UTF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208018 representing NM_002911 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCGTGGAGGCGTACGGGCCAGCTCGCAGACTCTCACTTTCTGGACACGGAGGAGCCGAGCTGC
TTGGCGCCGACACACAGGGCTCCGAGTTCGAGTTCACCGACTTTACTCTTCTAGCCAGACGCAGACGCC
CCCCGGCGGCCCGGGCGGCCGGTGGCGGCGGGAGGCCCGGGCGGCGGGCGGGCGCTGCC
GCGGGACAGCTCGACGCGCAGGTTGGGCCGAAGGCATCTGCAGAACGGGCTGTGGACACAGTGTAG
CCAAGACCAGCCAGTTGTTGGCTGAGTTGAACTTCGAGGAAGATGAAGAAGACACCTATTACACGAAGGA
CCTCCCCATACACGCCTGCAGTTACTGTGGAATACACGATCCTGCCTGCGTGGTTTACTGTAAATACCAGC
AAGAAGTGGTTCTGCAACGGACGTGAAATACTTCTGGCAGCCACATTGTAATCACCTTGTGAGGGCAA
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CAGCCCTGTGCCAGCCAGAGCAGCCTCAAGGACATCAACTGGGACAGCTCGCAGTGGCAGCCGCTGATCC
AGGACCGCTGCTCCTGTCTGGCTGGTCAAGATCCCCCTCGAGCAGGAGCAGCTGCGGGACGCCAGAT
CACGGCACAGCAGATCAACAAGCTGGAGGAGCTGTGGAAGGAAAACCTTCTGCCACGCTGGAGGACCTG
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CAGGGCCCGCCAGGCACGGGGAAGACGGTGACGTCGGCCACCATCGTCTACCACCTGGCCCGCAAGGCA
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 GGGGCTAAAGGTCGTGCGCCTCTGCGCCAAGAGCCGTGAGGCCATCGACTCCCCGGTGTCTTTTCTGGCC
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 CTGCTGCAGGGGAGGCCACCCGAAAGGCAAGACTGGTGTGGGGGAGCCGAGAAGAAGCCGCTTTGGGCT
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 AGCCGGAGCTGTCCAGGACAGTTACCTTGGTACGAGTTTAAATCACAAATCGACGTGGCGCTCTCACA
 GGACTCCACGTACCAGGGAGAGCGGGCTTACCAGCATGGCGGGGTGACGGGGCTGTCCCAGTAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG208018 representing NM_002911
 Red=Cloning site Green=Tags(s)

MSVEAYGPSSQTLTFLDTEEAELLGADTQGSEFEFTDFTLPSQTQTPPGGPGGGGGAGGPGGAGAGAA
 AGQLDAQVGPPEGILQNGAVDDSVAKTSQLLAELNFEDEEDTYTKDLPIHACSYCGIHDPACVVCNTS
 KKWFCNDRGNTSGSHIVNHLVRAKCKEVLHKDGPLGETVLECYNCGCRNVLLGFIPAKADSVVLLCR
 QPCASQSSLLKIDINWDSSQWQPLIQDRCFLSWLVKIPSEQEQLRARQITAQQINKLEELWKENPSATLEDL
 EKPGVDEEPQHVLRLRYEDAYQYQNIIFGPLVKLEADYDKLKEQSQTQDNITVRWDLGLNKKRIAYFTLPKT
 DSDMRLMQDEICLRYKGD LAPLWKGIGHVIVKVPDNYGDEIAIELRSSVGPVEVTHNFQVDFVWKSTSF
 DRMQSALKTFVAVDETSVSGYIYHKLLGHEVEDVIKCKQLPKRFTAQGLPDLNHSQVYAVKTVLQRPLSLI
 QGPPGTGKTVTSATIVYHLARQNGPVLVCAPSNIIVDQLTEKIHQTGLKVVRLCAKSREAIIDSPVSFLA
 LHNQIRNMDMPPELQKLQQLKDETEGELSSADEKRYRALKRTAERELLMNADVICCTCVGADPRLAKMQF
 RSILIDESTQATEPECMVPVVLGAKQLILVGDHCLGPVVMCKKAAKAGLSQSLFERLVVLRIRLQV
 QYRMHPALSAFSPNIFYEGSLQNGVTAADRKKGDFQWPQPKPMFFYVTQGEIASSGTSYLNRTA
 ANVEKITTKLLKAGAKPDQIGIITPYEGQRSYLQYMQFSGSLHTKLYQEVEIASVDAFQGREKDFIILS
 CVRANEHQIGIFLNDPRRLNVALTRARYGVIIIVGNPKALSKQPLWNHLLNYYKEQKVLVEGPLNNLRESL
 MQFSKPRKLVNTINPGARFMTTAMYDAREAIIPGSVYDRSSQGRPSSMYFQTHDQIGMISAGPSHVAAMN
 IPIPFNLVMPMPPPGYFGQANGPAAGRTPKGTGRGGRQKNRFGLPQSQTNLNPSQASQDVASQPF
 QGALTQGYISMSQPSQMSQPLSQPELSQDSYLGDEFKSIDVALSQDSTYQGERAYQHGGVTGLSQY

TRTRPLE - GFP Tag - V

Restriction Sites:

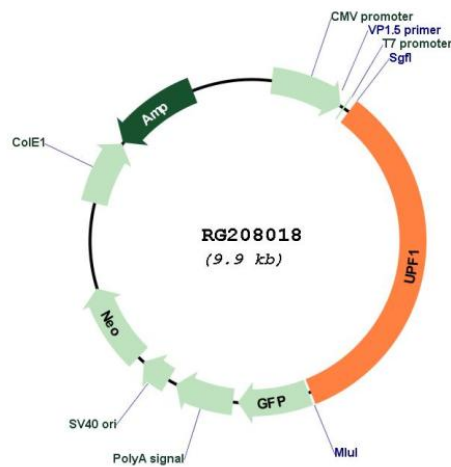
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_002911
 ORF Size: 3354 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](#)

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_002911.4](#)

RefSeq Size: 5360 bp

RefSeq ORF: 3357 bp

Locus ID: 5976

UniProt ID: [Q92900](#)

Cytogenetics: 19p13.11

Protein Families: Druggable Genome

Gene Summary: This gene encodes a protein that is part of a post-splicing multiprotein complex involved in both mRNA nuclear export and mRNA surveillance. mRNA surveillance detects exported mRNAs with truncated open reading frames and initiates nonsense-mediated mRNA decay (NMD). When translation ends upstream from the last exon-exon junction, this triggers NMD to degrade mRNAs containing premature stop codons. This protein is located only in the cytoplasm. When translation ends, it interacts with the protein that is a functional homolog of yeast Upf2p to trigger mRNA decapping. Use of multiple polyadenylation sites has been noted for this gene. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]