

Product datasheet for **MG226926**

Upf2 (NM_001081132) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Upf2 (NM_001081132) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Upf2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226926 representing NM_001081132, codon optimized . Due to the complexity of NM_001081132, 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**CGGATCGCC**

ATGCCTGCCGAGCGCAAGAAATCCGCCTCAATGGAAGAAAAGGAATCCCTGCTGAACAATAAGGAGAAAAG
ACTGCTCCGAGAGACGCCCTGTGAGCTCAAAGGAAAAGCCAAGAGATGATCTGAAAGTTACAGCCAAAAA
GGAGGTCAGCAAAGTACCCGAGGATAAAAAAAGAGACTCGAAGAGGATAAAAGGAAAAAAGAGGATAAA
GAGCGAAAAAGAAAGAGGAAGAGAAGGTGAAGGCCGAAGAGGAATTGAAAAAGAAGGAGGAGGAAGAGA
AGAAAAAGCAAGAAGAGGAGGAGCGCAAAAAACAGGAGGAACAGGCTAACGGCAACAGGAGGAGGCCGC
TGCCAGCTGAAGGAGAAGGAGGAATCCCTTCAGCTGCACCAAGAGGCCCTGGGAAAGACACCAACTGAGA
AAAGAGCTGAGATCCAAAAACCAGAACGCCCTGATAATAGACCCGAGGAGAATTCTTCAGTAGACTGG
ATTCTTCCCTGAAGAAGAATACCGCCTTCTGTTAAGAAATTGAAAACAATCACCGAGCAACAGCGCGACAG
CCTGAGTCACGATTTCAACGGTCTTAACCTGTCAAAGTATATTGCCGAAGCAGTAGCATCAATTGTTGAG
GCAAAACTGAAACTGAGCGATGTGAACGTGCGGCTCACTTGTGCTCCCTCTCCACCAGAGATATCCG
ATTTTGCTCCGAGTTTGCTGCAGGTGTGAAAAAGCACTTTGAGGCGAGGAAGGAAGAGAAGACACCCAA
CATCACTAAGCTCAGGACAGACCTGCGGTTCAATGCCAAGTACCATAGTTGGTATCTTCACAGACAAA
GAGGGCCTCAGTCTCATCTACGAGCAGCTGAAGAGCATCATTAAATGCCGATCGGGAGTCACACACGCACG
TCTCAGTCGTGATCAGTTTCTGTGCCACTGCGGCGACGACATCGCAGGACTGGTTCCAAGGAAGGTTAA
GTCCGCGGCGGAGAAGTTAACCTGTCTTCCCACCATCTGAAATCATTTACCTGAAAAGCAGCAGCCA
TTCCAGAATCTCCTCAAGGAGTACTTTACGAGCTTGACAAGCACCTGAAGAGGGACCACCGGGAGCTTC
AAAACACAGAACGCCAGAACCGGCGCATACTGCATTCTAAAGGAGAAGTGAAGTGCAGACACAAAGCA
GTATGAAGAATTCGCTATGTCCTACCAGAAGCTCTTGGCTAACAGCCAGTCACTTGCAGGACTTGCTGGAC



[View online »](#)

GAGAACATGCCAGATCTGCCCAAGACAAACCCACCCCTGAGGAGCACGGTCCAGGTATCGATATTTTCA
CACCAGGGAAACCTGGCGAGTATGATCTCGAGGGCGGGATCTGGGAAGATGAAGATGCCAGAAATTTCTA
CGAGAACCTGATTGACCTGAAGGCTTCGTGCCAGCCATCCTGTTCAAAGATAACGAGAAATCTCAGAAC
AAGGACAGTAACAAGGATGACAGTAAAGAGGCCAAAGAACCCAAGGACAATAAAGAGGCTAGCTCCCCAG
ACGACCTTGAACCTGAACTTGAACCTGGAGATCAACGATGACACGCTTGAGCTGGAAGGAGCAGACGA
GGCGGAAGATCTGACCAAGAAGCTGCTTGATGAGCAGGAACAAGAGGACGAAGAAGCCTCTACAGGGAGC
CACCTGAAATTTGATCGTAGACGCCTTCTGCAGCAGCTCCCAACTGCGTGAACCGAGATCTCATAGACA
AGGCAGCCATGGATTTCTGTATGAACATGAACACAAAGGCAAATCGCAAGAAGCTGGTGGCGGCTCTCTT
CATCGTACCCCGCAGAGGCTGGATTTGCTTCCCTTCTATGCTAGGTTGGTGGCGACCCCTCACCCCTGT
ATGAGTGACGTGGCAGAAGATTTGTGTAGCATGCTGCGAGGGGATTTTCGATTCCATGTGAGAAAAGAAAG
ATCAGATAAACATTGAGACTAAGAATAAGACCGTTAGATTTATTGGGGAGCTCACCAAATTTAAATGTT
CACCAAAAACGATACACTCCATTGCCTGAAAATGCTCTTGAGTGACTTCTCATCACCATATCGAAATG
GCGTGCACTGCTGGAGACGTGCGGTCGGTTTCTGTTTCGGAGCCCGAATCTCATCTGAGGACCTCAG
TGTTGCTGGAACAGATGATGAGGAAAAAGCAGGCAATGCACCTGGATGCTCGGTATGTGACCATGGTGG
AAACGCCTACTATTATTGCAACCCACCGCTGCCGAAAAGACAGTGCGGAAGAAAAGGCCCCCCCTGCAG
GAGTATGTCCGAAACTTTTGTACAAGGATCTGAGTAAGGTAACCACTGAGAAGGCTTGGCGGAGATGC
GCAAGCTGCCTTGCAAGATCAGGAGGTTAAGGATTATGTCATATGTTGTATGATAAATATCTGGATGT
GAAGTACAATTCATTTCATTGCGTGGCAAACTGCTCGCGGGCTCGTACTTTACCAGGAGGATGTGCGC
ATACATGTTGTGGACGGAGTACTCGAAGACATCCGGTTGGGCATGGAAGTGAATCAGCCGAAGTTCAACC
AGCGCAGGATATCTCCGCTAAGTTTTTGGGCGAACTGTATAATTACCGCATGGTTGAAAGTGCAGTGAT
CTTCAGAACGTTGACTCCTTCACTTCTTCGGAGTGAACCCGACGGCAGCCCTTCTTCTCGACCCT
CCTGAGCACCTGTTTCGGATCAGGCTGGTGTGTACCATCTCGACAGTGTGGCCAATACTTTGATCGAG
GCTCTAGTAAACGCAAGCTCGACTGTTTTCTCGTATACTTCCAGCGGTACGTCTGGTGGAAAGAAAGTCT
GGAGGTGTGGACAAAGGACCACCCTTTCCCTATTGACATTGACTACATGATCTCCGACACTCTGGAACCTG
TTGCGACCCAAAATAAAGCTGTGTAATAGCTTGAGGAGAGCATCCGCCAGGTACAGGATCTTGAACGGG
AATTCCTCATAAAGCTGGGCTGGTAAACGACAAAGAGTCTAAGGACTCCATGACAGAAGGGGAAAATCT
GGAGGAGGACGAGGAAGAAGAGGAGGGAGGCGCCGAGACAGAAGAGCAATCTGGCAACGAGAGTGAGGTG
AACGAGCCTGAGGAGGAGGAAGGCTCTGAAGAGGAAGAAGAGGGAGAAGAAGAGGAGGAGGAGAACACTG
ATTACCTGACAGATTCTAATAAGGAGAATGAAACCGACGAGGAAAACGCGGAGGTGATGATTAAGGTGG
AGGATTGAAGCACGTTCCCTTGCCTTGGAGACGAGGACTTCATTCAGGCCCTGGATAAATGATGTTGGAG
AACCTTCAGCAGAGAAGCGGAGAGTCCGTTAAAGTGCATCAGCTGGACGTGGCCATCCCCCTGCATCTGA
AGTCCCAACTCCGCAAGGGCCGCTCTGGGTGGCGGCAAGGAGAGACAGAGTCTGCTGACACAATGCC
ATTTGTGATGTTGACAAGAAAGGTAATAAGCAGCAGTTCAAGATCTTGAATGTCCCATGTCTTCCCAG
TTGGCCGCAATCACTGGAAATCAGCAACAGGCCGAACAGGAGGAGAGAATGAGGATGAAAAGCTGACAC
TTGACATTAACGAGAGACAGGAACAGGAGGACTATCAAGAGATGTTGCAGTCACTGGCCAGCGCCAGC
CCCTGCAATAACAAATAGAGAGCGCAGGCTAGGTATCAACACCCTAAGGGGGCACCAACCGCTGATCTG
ATTTTCAAGACAGGTGGCAGAAGAAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

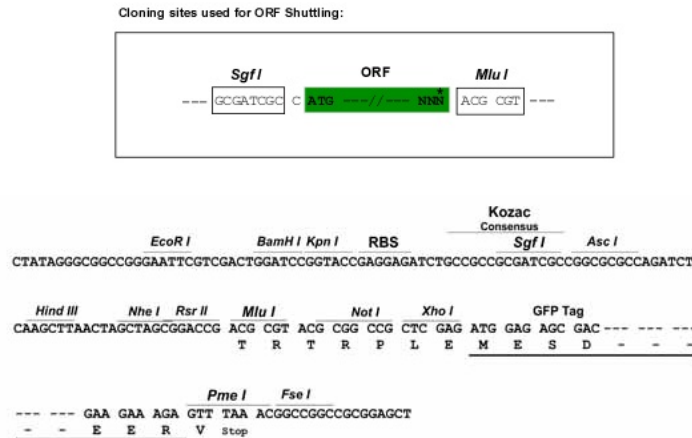
Protein Sequence: >MG226926 representing NM_001081132
 Red=Cloning site Green=Tags(s)

MPAERKKSASMEEKESLLLNKEKDCSERRPVSSKEKPRDDLKVTAKKEVSKVPEDKKRLEEDKRKKEDK
 ERKKKEEEKVKAEEELKKKEEEEEKKQEEERKKQEEQAKRQEEAAAQLKEEESLQLHQEAWERHQLR
 KELRSKNQNPADNRPEENFFSRLDSSLKNTAFVKKLKITTEQQRDSL SHDFNGLNLSKYIAEAVASIVE
 AKLKLSDVNCAHLCSLFHQRYSDFAPSLLQVWKKHFEARKEEKTNPITKLRDTRDLRFIAELTIVGIFTDK
 EGLSLIYEQLKSIINADRESHTHVSVVISFCRHCDDIAGLVPRKVKSAAEKFNLSFPPSEIISPEKQQP
 FQNLLKEYFTSLTKHLKRDHRELQNTERRILHSGKELSEDRHKQYEEFAMSYQKLLANSQSLADLLD
 ENMPDLQDKPTPEEHGPGIDIFTPGKPGEYDLEGGIWEDEDARNFYENLIDLKAFVPAILFKDNEKSNQ
 KDSNKDSSKEAKEPKDNKEASSPDDLELELENLEINDDTLELEGADEADLTKLLDEQEQEDEEASTGS
 HLKLI DVAF LQQLPNCVNRDLIDKAAMDFCMNMNTKANRKKLVRALFIVPRQLDLLPFYARLVATLHPC
 MSDVAEDLCSMLRGDFRFHVRKKDQINIETKNKTVRFIGELTKFKMFTKNDTLHCLKMLLSDFSHHHIEM
 ACTLLETGCRFLFRSPESHLRTSVLLEQMMRKKQAMHLDARYVTMVENAYYYCNPPPAEKTVRKKRPLQ
 EYVRKLLYKDLKVTTEKVL RQMRKLPWQDQEVKDYVICMINIWNVKYNSIHCVANLLAGLVLYQEDVG
 IHVVDGVLIEDIRLGMENVQPKFNQRRISSAKFLGELYNYRMVESAVIFRTLYSFTSFGVNPDPGSPSSLDP
 PEHLFRIRLVCTILDTCGQYFDRGSSKRKLD CFLVYFQRYVWKKSLVWTKDHPFPIDIDYMSD TLEL
 LRPKIKL CNSLEESIRVQDLEREF LKLG VNDKESKDSMTEGENLEEDEEEEEGGAETEEQSGNESEV
 NEPEEEEGSEEEEEEEEEENTDYL TDSNKENETDEENAEVMIKGGGLKHVPCVEDEDFIQALDKMMLE
 NLQQRSGESVKVHQLDVAIPLHLKSQLRKGPP LGGGEGETESADTMPFVMLTRKGNKQQFKILNVPMSQ
 LAANHWNQQQAEQEERM RKKLTLDINERQE QEDYQEMQLQSLAQRPA PANTNRERRRPRYQHPKGAPNADL
 IFKTGRRRR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

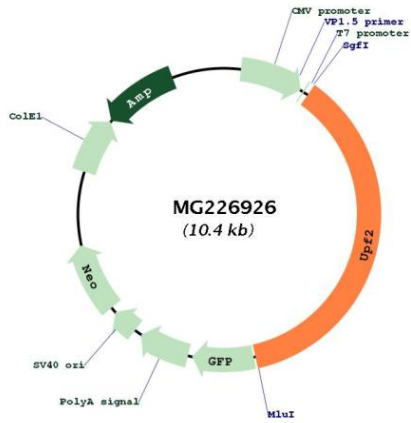


ACCN: NM_001081132

ORF Size: 3807 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:	<ol style="list-style-type: none">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_001081132.1 , NP_001074601.1
RefSeq Size:	5174 bp
RefSeq ORF:	3810 bp
Locus ID:	326622
UniProt ID:	A2AT37
Cytogenetics:	2 A1
Gene Summary:	Involved in nonsense-mediated decay (NMD) of mRNAs containing premature stop codons by associating with the nuclear exon junction complex (EJC). Recruited by UPF3B associated with the EJC core at the cytoplasmic side of the nuclear envelope and the subsequent formation of an UPF1-UPF2-UPF3 surveillance complex (including UPF1 bound to release factors at the stalled ribosome) is believed to activate NMD. In cooperation with UPF3B stimulates both ATPase and RNA helicase activities of UPF1. Binds spliced mRNA.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226926