

Product datasheet for RC215944

UPF2 (NM_080599) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UPF2 (NM_080599) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UPF2
Synonyms:	HUPF2; RENT2; smg-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215944 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCAGCTGAGCGTAAAAAGCCAGCAAGTATGGAAGAAAAAGACTCTTTACAAACAACAAGGAAAAAG
ACTGCAGTGAAAGGCGGACAGTGAGCAGCAAGGAGAGGCCAAAAGACGATATCAAGCTCACTGCCAAGAA
GGAGGTCAAGAGCCCTGAAGACAAGAAGAAGAGACTGGAAGATGATAAGAGAAAAAGGAAGACAAG
GAACGCAAGAAAAAGACGAAGAAAAGTGAAGGCAGAGGAAGAATCAAAGAAAAAGAAGGAAGAAA
AAAAGAAACATCAAGAGGAAGAGAGAAAAGCAAGAAGAGCAGGCCAAACGTCAGCAAGAAGAAGAAGC
AGCTGCTCAGATGAAAGAAAAAGAAGAATCCATTAGCTTCATCAGGAAGCTTGGGAACGACATCATTTA
AGAAAGGAACTTCGTAGCAAAAACAAAATGCTCCGGACAGCCGACCAGAGGAAAACCTTCTTCAGCCGCC
TCGACTCAAGTTTGAAGAAAAACTGCTTTTGTCAAGAACTAAAACTATTACAGAACAACAGAGAGA
CTCCTTGTCCCATGATTTAATGGCCTAAATTTAAGCAAATACATTGCAGAAGCTGTAGCTTCCATCGTG
GAAGCAAACTAAAACTCTGTATGTGAAGTGTGCTGTGCACCTCTGCTCTCTTTCCACAGCGTTATG
CTGACTTTGCCCATCACTTCTTCAGGTCTGGAAAAACATTTTGAAGCAAGGAAAGAGGAGAAAAACCC
TAACATCACCAAGTTAAGAACTGATTTGCGTTTTATTGCAGAATTGACAATAGTTGGGATTTTCACTGAC
AAGGAAGGTCTTTCCTTAATCTATGAACAGCTAAAAAATTATTAATGCTGATCGGGAGTCCCACACTC
ATGTCTCTGTAGTGATTAGTTTCTGTCGACATTGTGGAGATGATATTGCTGGACTGTACCAAGGAAAGT
AAAGAGTGCTGCAGAGAAGTTAATTTAGTTTTCTCCTAGTGAGATAATTAGTCCAGAGAAAACAACAG
CCCTTCCAGAATCTTTAAAAGAGTACTTTACGCTTTTGACCAAACACTGAAAAGGGACCACAGGGAGC
TCCAGAATACTGAGAGACAAAACAGGCGCATTCTACATTCTAAAGGGGAGCTCAGTGAAGATAGACATAA
ACAGTATGAGGAATTTGCTATGTCTTACCAGAAGCTGCTGGCAAATCTCAATCCTTAGCAGACCTTTTG
GATGAAAAATATGCCAGATCTTCTCAAGACAAACACCAGAAGAACATGGGCTGGAATTGATATAT
TCACACCTGGTAAACCTGGAGAATATGACTTGGAAAGTGGTATATGGGAAGATGAAGATGCTCGGAATTT
TTATGAGAACCTCATTGATTTGAAGGCTTTTGTCCAGCCATCTGTTTAAAGACAATGAAAAAGTTGT



[View online »](#)

CAGAATAAAGAGTCCAACAAAGATGATACCAAAGAGGCAAAAAGAACTAAGGAGAATAAGGAGGTATCAA
GTCCCCGATGATTTGGAACCTTGAGTTGGAGAATCTAGAAATTAATGATGACACCTTAGAATTAGAGGGTGG
AGATGAAGCTGAAGATCTTACAAAGAACTTCTTGATGAACAAGAACAAGAAGATGAGGAAGCCAGCACT
GGATCTCATCTCAAGCTCATAGTAGATGCTTTCCTACAGCAGTTACCCAAGTGTCAACCGAGATCTGA
TAGACAAGGCAGCAATGGATTTTGCATGAACATGAACACAAAAGCAAACAGGAAGAAGTTGGTACGGGC
ACTCTTCATAGTTCCTAGACAAAAGTTGGATTTGCTACCATTTTATGCAAGATTGGTTGCTACATGTGCAT
CCCTGCATGCTGATGTAGCAGAGGATCTTTGTTCCATGCTGAGGGGGGATTTTCAGATTTTCATGTACGGA
AAAAGGACCAGATCAATATTGAAACAAAAGAATAAAACTGTTTCGTTTTATAGGAGAATAACTAAGTTTAA
GATGTTACCAAAAAATGACACACTGCATTGTTTAAAGATGCTTCTGTGAGACTTCTCTCATCACCATATT
GAAATGGCATGCACCCTGCTGGAGACATGTGGACGGTTTCTTTTCAGATCTCCAGAATCTCACCTGAGGA
CCAGTGTACTTTTGGAGCAAATGATGAGAAAGAAGCAAGCAATGCATCTTGATGCGAGATACGTCACAAAT
GGTAGAGAATGCATATTACTACTGCAACCCACCTCCAGCTGAAAAACCGTGAAAAAGAAACGCTCCTCCT
CTCCAGGAATATGTCCGAAACTTTTGTACAAGGATCTCTAAGGTTACCACCGAGAAGGTTTTGAGAC
AGATGCGAAAGCTGCCCTGGCAGGACCAAGAAGTAAAGACTATGTTATTTGTTGATGATAAACATCTG
GAATGTGAAATATAATAGTATTCATTGTGTAGCCAACCTCTTAGCAGGACTAGTGTCTACCAAGAGGAT
GTTGGGATCCACGTTGTGGATGGAGTGTAGAAGATATTCGATTAGGAATGGAGGTTAATCAACCTAAAT
TTAATCAGAGGCGCATCAGCAGTGCCAAGTTCCTTAGGAGAAGTTTACAATTACCGAATGGTGAATCAGC
TGTTATTTTTCAGAACTCTGTATTCTTTACCTCATTGTTGTTAATCCTGATGGCTCTCCAAGTTCCCTG
GACCCACCTGAGCATCTTTTCAGAAATTAGACTCGTATGCACTATTCTGGACACATGTGGCCAGTACTTTG
ACAGAGGTTCCAGTAAACGAAAACCTTGATTGTTTCCTTGATATTTTTCAGCGTTATGTTTGGTGAAGAA
AAGTTTGGAGGTTTGGACAAAAGACCATCCATTTCTATTGATATAGATTACATGATCAGTGATACACTA
GAACTGCTAAGACCAAAGATCAAACCTGTAAATCTCTGGAAGAATCCATCAGGCAGGTACAAGACTTGG
AACGAGAATTCTTAATAAAACTAGGCCTAGTAAATGACAAAGACTCAAAGATTCTATGACAGAAGGAGA
AAATCTTGAAGAGGATGAAGAAGAAGAAGGTTGGGGCTGAAACAGAAGAACAATCTGGAAATGAAAGT
GAAGTAAATGAGCCAGAAGAAGAGGAGGTTCTGATAATGATGATGATGAGGGAGAAGAAGAGGAGGAAG
AGAATACAGATTACCTTACAGATTCCAATAAGGAAAATGAAACCGATGAAGAGAATACTGAGGTAATGAT
TAAAGGCGGTGGACTTAAGCATGTACCTTGTGTAGAAGATGAGGACTTCATTCAAGCTCTGGATAAAATG
ATGCTAGAAAATCTACAGCAACGAAGTGGTGAATCTGTTAAAGTGCACCAACTAGATGTTGCCATTCCTT
TGCATCTCAAAGCCAGCTGAGGAAAGGGCCCCACTGGGAGGTGGGAAGGAGAGGCTGAGTCTGCAGA
CACAATGCCGTTTGTATGTTAACAAGAAAAGGCAATAAACAGCAGTTTAAAGATCCTTAATGTACCCATG
TCCTCTCAACTTGCTGCAATCACTGGAACCAGCAACAGGCAGAACAGAAGAGAGGATGAGAATGAAAA
AGCTCACACTAGATATCAATGAACGGCAAGAACAAGAAGATTATCAAGAAATGTTGCAGTCTCTGCACA
GCGCCAGCTCCAGCAAAACCAATCGTGAGAGGCGGCCTCGCTACCAACATCCGAAGGGAGCACCTAAT
GCAGATCTAATCTTAAAGACTGGTGGGAGGAGACGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215944 protein sequence
 Red=Cloning site Green=Tags(s)

MPAERKKPASMEEKDSLNNKEKDCSERRTVSSKERPKDDIKL TAKKEVSKAPEDKKRLEDDKRRKEDK
 ERKKKDEEKVKAEEEESKKKEEEEKHKHQEEERKKQEEQAKRQEEEEAAAQMKKEEESIQLHQEAWERHHL
 RKELRSKNQNAPDSRPEENFFSRLDSSLKKNATFVKKLTITEQQRDSL SHDFNGLNLSKYIAEAVASIV
 EAKLKISDVNCAVHLCSLFHQRYADFAPSLQVWKKHFEARKEEKT PNIITKLRTDLRFIAELTIVGIFTD
 KEGLSLIYEQLKNIINADRESHTHVSVVISFCRHCDDIAGLVPRKVKSAAEKFNLSFPPSEIISPEKQQ
 PFQNLKKEYFTSLTKHLKRDHRELQNTERQNRRLHSHKSELSEDRHKQYEEFAMSYQKLLANSQSLADLL
 DENMPDLPQDKPTPEEHGPGIDIFTPGKPGYDLEGGIWEDEDARNFYENLIDLKAFVPAILFKDNEKSC
 QNKE SNKDDTKEAKESKENKEVSSPDDLELEENLEINDDTLELEGGDEAEDLTKLLDEQEQEDEEAST
 GSHLKLIVDAFLQQLPNCVNRDLIDKAAMDFCMNMNTKANRKKLVRALFIVPRQRLDLLPFYARLVATLH
 PCMSDVAEDLCSMLRGDFRFHVRKKDQINIETKNKTVRFIGELTKFKMFTKNDTLHCLKMLLSDFSHHHI
 EMACTLLETGCRFLFRSPESHLRTSVLLEQMMRKKQAMHLDARYVTMVENAYYYCNPPEAKTVKKRPP
 LQEYVRKLLYKDL SKVTTEKVL RQMRKLPWQDQEVKDYVICCMINIWNVKYNSIHCVANLLAGLVLYQED
 VGIHVVDGVLEDIRLGMEVNPQKFNQRRISSAKFLGELYNYRMVESAVIFRTLYSFTSFGVNPDPGSPSSL
 DPPEHLFRIRLVCTILDTCGQYFDRGSSKRKLD CFLVYFQRYVWVKSLSEVWTKDHPFPIIDIDYMI SDTL
 ELLRPKIKL CNSLEESIRVQDLEREFLLKGLVNDKDSKDSMTEGENLEEEDEEEEGGAETEEQSGNES
 EVNEPEEEEGSDNDDDEGEEEEENTDYL TDSNKENETDEENTEVMIKGGGLKHVPCVEDEDFIQALDKM
 MLENLQQRSGESVKVHQLDVAIPLHLKSQLRKGPPGGGEGEAEASDTPMPFVMLTRKGNKQQFKILNVPM
 SSQLAANHWNQQAEQEERM RKKLTLDINERQE QEDYQEMQLSLAQRPA PANTNRERRRPRYQHPKGAPN
 ADLIFKTGGRRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

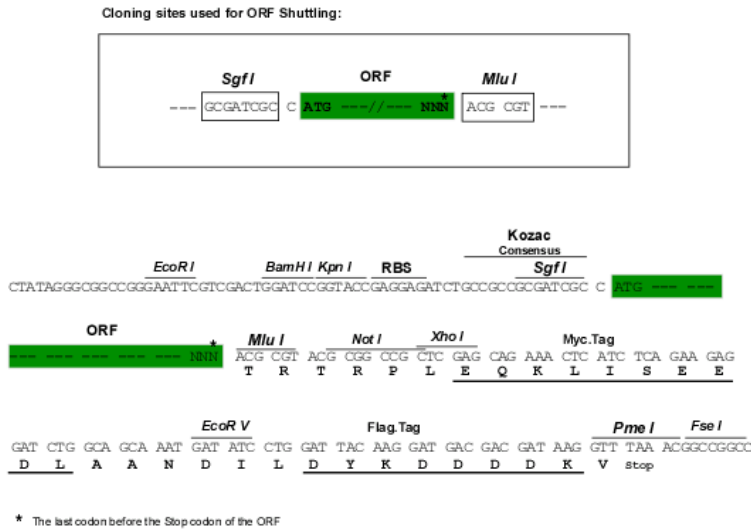
Chromatograms:

https://cdn.origene.com/chromatograms/mk6678_c09.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

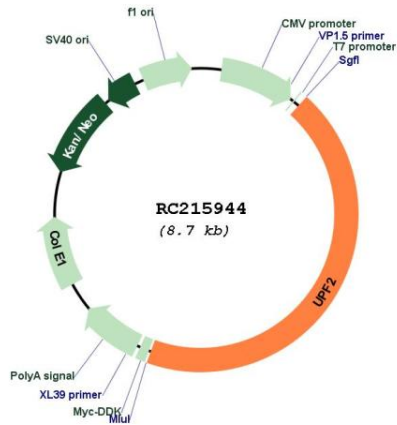
NM_080599

ORF Size:

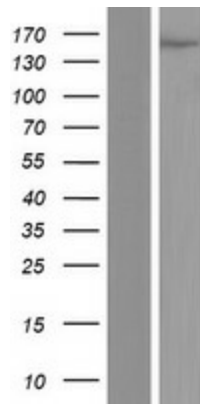
3816 bp

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_080599.2 , NP_542166.1
RefSeq Size:	5387 bp
RefSeq ORF:	3819 bp
Locus ID:	26019
UniProt ID:	Q9HAU5
Cytogenetics:	10p14
MW:	147.8 kDa
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 in the perinuclear area. It interacts with translation release factors and the proteins that are functional homologs of yeast Upf1p and Upf3p. Two splice variants have been found for this gene; both variants encode the same protein. [provided by RefSeq, Jul 2008]

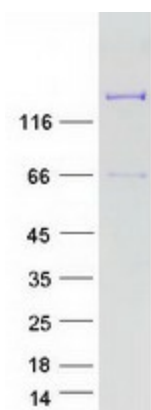
Product images:



Circular map for RC215944



Western blot validation of overexpression lysate (Cat# [LY414488]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC217633] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UPF2 protein (Cat# [TP315944]). The protein was produced from HEK293T cells transfected with UPF2 cDNA clone (Cat# RC215944) using MegaTran 2.0 (Cat# [TT210002]).