

Product datasheet for **RC221828**

UPF3B (NM_023010) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UPF3B (NM_023010) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UPF3B
Synonyms:	HUPF3B; MRX62; MRX82; MRXS14; RENT3B; UPF3BP1; UPF3BP2; UPF3BP3; Upf3p-X; UPF3X
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC221828 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGGAAGAGAAGGAGCACAGGCCTAAGGAGAAGCGAGTAACCCTGTTAACCCCGCCGGGGCCACAG
 GCAGCGGTGGTGGGACCTCGGGGACAGCTCCAAGGGGGAAGATAAGCAGGATCGCAACAAGGAGAAGAA
 AGAAGCGCTGAGCAAGGTGGTAATTCGAAGATTACCTCCCACTTTGACCAAGGAGCAGCTTCAGGAACAT
 CTTCAACCTATGCCTGAGCATGATTATTTTGAGTTTTTTCTAATGATACGAGTTTGATCCTCATATGT
 ATGCCAGAGCATACATCAACTTTAAAAACCAAGAGGACATTATTTTGTCAGGGATCGCTTTGATGGTTA
 TGTATTCCTTGACAATAAAGGTGAGGAATATCCCGCTATAGTAGAATTTGCACCTTTCAAAAAGCTGCA
 AAAAAGAAGACTAAGAAAAGAGATACCAAAGTCGGGACTATCGATGATGATCCAGAATATAGAAAGTTTT
 TGGAAAGTTATGCCACAGATAATGAGAAAATGACATCTACTCCAGAGACACTGCTAGAGGAAATAGAAGC
 AAAAAATAGAGAATTAATAGCTAAAAAGACAACCCCACTTTTGAGCTTCCTGAAAAACAAGCAGAGAATG
 AGAGAAGAAAAGAGAGAAGAAAGGAGGAGAGAGAAAATAGAAAGAAAAAGACAAAGAGAAGAAGAGAGGA
 GGAAATGGAAAGAAGAAGAGAAAACGAAAAAGGAAAGATATAGAAAAGCTAAAGAAGATAGACAGAATTCC
 AGAAAGGGACAAATTAAGGATGAACCAAAGATTAAGCTGCTCAAGAAGCCAGAAAAAGGAGATGAAAAA
 GAATTGGACAAAAGAGAAAAAGCCAAGAAATTGGACAAAGAGAATCTCAGTGATGAAAGAGCCAGTGGGC
 AAAGTTGTACATTGCCAAGCGTTCTGATAGCGAACTTAAGATGAAAAACCAAGAGACCTGAAGATGA
 GAGCGGCAGAGACTATAGGGAGAGGGAACGGGAATATGAACGAGATCAGGAGCACATACTTCGAGAAAGA
 GAGAGGCTGAAGCGGCAAGAAGAAGAGCGCCGTAGGCAGAAGGAGCGCTATGAGAAAGAGAAGACTTTTA
 AGAGAAAAGAAGAAGAAATGAAAAAGAGAAAGACACACTTCGGGATAAGGAAAGAAGGCTGAAAGTAC
 AGAATCAATAGGCAGCTCAGAAAAAACTGAAAAGAAAGAAGAGTGGTCAAGAGAGATCGAATAAGAAAC
 AAGGATCGTCCAGCGATGCAGCTTTACCAACCAGGAGCTCGAAGCCGAAATCGACTCTGTCCCCCTGATG
 ACAGCACCAAGTCTGGAGATTACGACAGCAGAAAGGAAGCAGGAAAGTGGTATTAGCCATAGAAAAGAAGG
 AGGAGAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221828 protein sequence
 Red=Cloning site Green=Tags(s)

MKEEKEHRPKEKRVTLTPAGATGSGGGTSGDSSKGEDKQDRNKEKKEALSKVVIRRLPPTLTKEQLQEH
 LQPMPEHDYFEFFSNDTSLYPHYARAYINFKNQEDIILFRDRFDGYVFLDNKGQYPAIVEFAPFQKAA
 KKKTKKRDTKVGTIDDDPEYRKFLSYATDNEKMTSTPETLLEEIEAKNRELIAKKTTPLSFLKNKQRM
 REEKREERRRREIERKRQREERRRWKEEEKRKRKDIEKLKKIDRIPERDKLKDEPKIKLLKKPEKGDEK
 ELDKREKAKKLDKENLSDERASGQSCTLPKRSDSELKDEKPKRPEDESGRDYREREREYERDQEHLRER
 ERLKRQEEERRRQKERYEKEKTFKRKEEEMKKEKDTLRDKGKKAESTESIGSSEKTEKKEEVVKRDRIRN
 KDRPAMQLYQPGARSRNRLCPPDDSTKSGDSAAERKQESGISHRKEGGEE

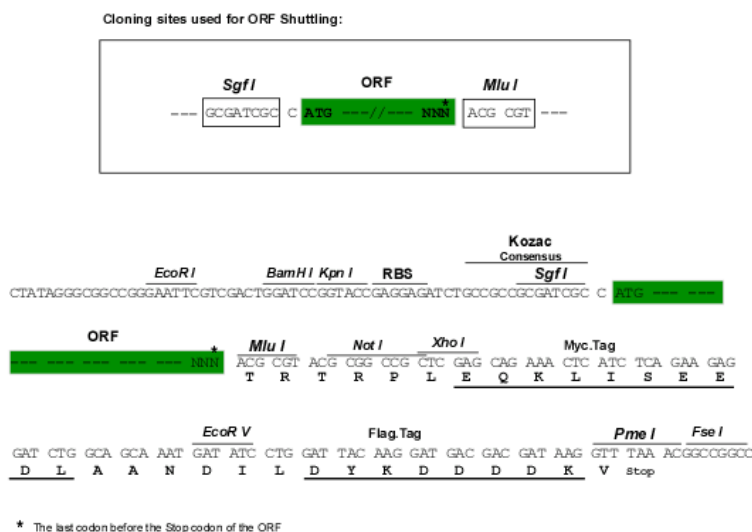
TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6562_c11.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_023010

ORF Size: 1410 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_023010.3](#), [NP_075386.1](#)

RefSeq Size: 2365 bp

RefSeq ORF: 1413 bp

Locus ID: 65109

UniProt ID: [Q9BZI7](#)

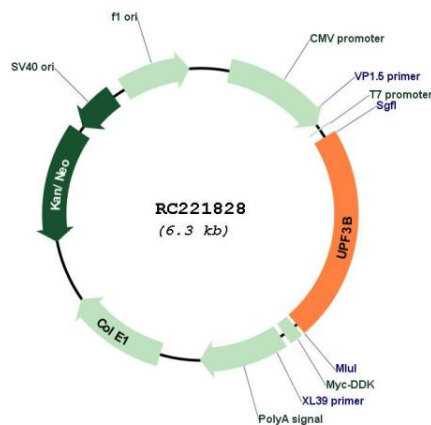
Cytogenetics: Xq24

Domains: Smg4_UPF3

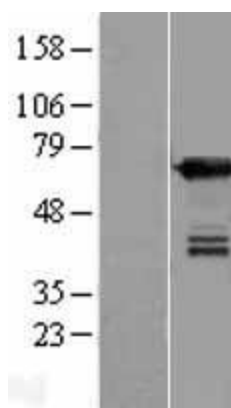
MW: 56.2 kDa

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. The encoded protein is one of two functional homologs to yeast Upf3p. 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 binds to the mRNA and remains bound after nuclear export, acting as a nucleocytoplasmic shuttling protein. It forms with Y14 a complex that binds specifically 20 nt upstream of exon-exon junctions. This gene is located on the long arm of chromosome X. Two splice variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

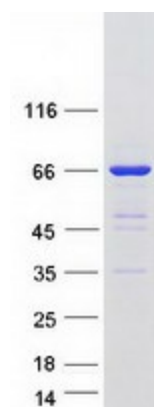
Product images:



Circular map for RC221828



Western blot validation of overexpression lysate (Cat# [LY411484]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221828 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UPF3B protein (Cat# [TP321828]). The protein was produced from HEK293T cells transfected with UPF3B cDNA clone (Cat# RC221828) using MegaTran 2.0 (Cat# [TT210002]).