

## Product datasheet for RC202567

### EIF4A3 (NM\_014740) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EIF4A3 (NM_014740) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EIF4A3
Synonyms:	DDX48; eIF-4A-III; eIF4A-III; eIF4AIII; Fal1; MUK34; NMP265; NUK34; RCPS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202567 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGACCAGGCCACGATGGCGACCTCGGGCTCGGCGCAAAGCGGCTGCTCAAAGAGGAAGACATGA  
CTAAAGTGAATTCGAGACCAGCGAGGAGGTGGATGTGACCCACGTTTCGACACCATGGGCTCGGGGA  
GGACCTGTGCGGGCATCTACGCTTACGGTTTTGAAAAACCATCAGCAATCCAGCAACGAGCAATCAAG  
CAGATCATCAAAGGGAGAGATGTCATCGCACAGTCTCAGTCCGGCACAGGAAAAACGCCACCTTCAGTA  
TCTCAGTCTCCAGTGTGGATATTCAGTTCGTGAACTCAAGCTTTGATCTTGGCTCCACAAGAGA  
GTTGGCTGTGCAGATCCAGAAGGGGCTGCTTGGCTCTCGGTGACTACATGAATGTCCAGTGCCATGCCTGC  
ATTGGAGGCCAATGTTGGCGAGGACATCAGGAAGCTGGATTACGGACAGCATGTTGTCCGGGCACTC  
CAGGGCGTGTGGATGATTTCGTCGAGAAGCCTAAGGACACGTGCTATCAAATGTTGGTTTTGGA  
TGAAGCTGATGAAATGTTGAATAAAGTTTTCAAAGAGCAGATTTACGATGTATACAGGTACCTGCCTCCA  
GCCACACAGGTGGTTCATCAGTGCCACGCTGCCACACGAGATTCTGGAGATGACCAACAAGTTTCATGA  
CCGACCAATCCGCATCTTGGTAAACGTGATGAATTGACTCTGGAAGGCATCAAGCAATTTTTCGTGCC  
AGTGGAGAGGGAAGAGTGGAAATTTGACACTCTGTGTGACCTCTACGACACACTGACCATCACTCAGGCG  
GTCATCTTCTGCAACACCAAAGAAAGGTGGACTGGCTGACGGAGAAAATGAGGGAAGCCAACTTCACTG  
TATCCTCAATGCATGGAGACATGCCCCAGAAAGAGCGGGAGTCCATCATGAAGGAGTTCCGGTCGGGCGC  
CAGCCGAGTGCTATTTCTACAGATGTCTGGGCCAGGGGTTGGATGTCCCTCAGGTGTCCCTCATCATT  
AACTATGATCTCCCTAATAACAGAGAATTGTACATACACAGAATGGGAGATCAGGTCGATACGGCCGGA  
AGGGTGTGGCCATTAACCTTTGTAAGAATGACGACATCCGCATCCTCAGAGATATCGAGCAGTACTATTC  
CACTCAGATTGATGAGATGCCGATGAACGTTGCTGATCTTATC

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC202567 protein sequence  
Red=Cloning site Green=Tags(s)

MATTATMATSGSARKRLKKEEDMTKVEFETSEEVDVPTPTFDTMGLREDLLRGIYAYGFEKPSAIQQRAIK  
 QIIKGRDVIAQSQSGTGKTATFISISVLQCLDIQVRETQALILAPTRELAVQIQKLLALGDYMNQCHAC  
 IGGTNVGEDIRKLDYQHVVAGTPGRVDFMIRRRSLRTRAIKMLVLDEADEMLNKGFKQEIYDVYRYLPP  
 ATQVVLISATLPHEILEMTNKFMTDPIRILVKRDELTEGKQFFVAVEREEWKFDLTLCDLYDTLTITQA  
 VIFCNTKRKVDWLTEKMRANFTVSSMHGDMPQKERESIMKEFRSGASRVLISTDVMARGLDVDPQVSLII  
 NYDLPNNRELYIHRIGRSGRYGRKGVAINFVKNDIRILRDIEQYYSTQIDEMPMNVADLI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6150\\_g10.zip](https://cdn.origene.com/chromatograms/mk6150_g10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_014740

**ORF Size:** 1233 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\\_014740.4](#)

**RefSeq Size:** 1734 bp

**RefSeq ORF:** 1236 bp

**Locus ID:** 9775

**UniProt ID:** [P38919](#)

**Cytogenetics:** 17q25.3

**Domains:** DEAD, helicase\_C

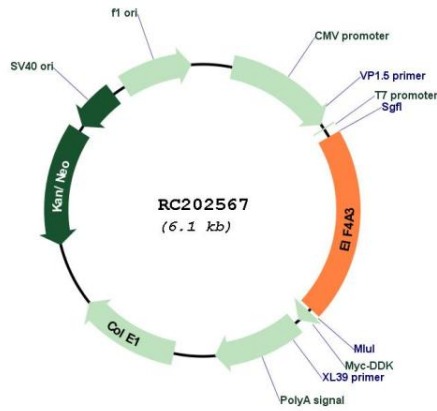
**Protein Families:** Druggable Genome

**Protein Pathways:** Spliceosome

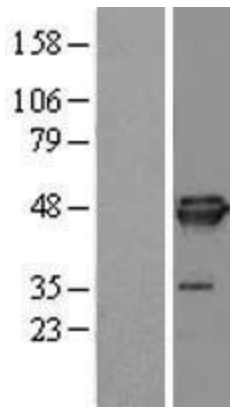
**MW:** 46.9 kDa

**Gene Summary:** This gene encodes a member of the DEAD box protein family. DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases. They are implicated in a number of cellular processes involving alteration of RNA secondary structure, such as translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, some members of this family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. The protein encoded by this gene is a nuclear matrix protein. Its amino acid sequence is highly similar to the amino acid sequences of the translation initiation factors eIF4AI and eIF4AII, two other members of the DEAD box protein family. [provided by RefSeq, Jul 2008]

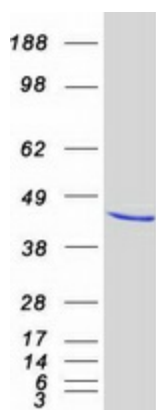
Product images:



Circular map for RC202567



Western blot validation of overexpression lysate (Cat# [LY402368]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202567 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EIF4A3 protein (Cat# [TP302567]). The protein was produced from HEK293T cells transfected with EIF4A3 cDNA clone (Cat# RC202567) using MegaTran 2.0 (Cat# [TT210002]).