

# **Product datasheet for RC201740**

### EIF3F (NM\_003754) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** EIF3F (NM\_003754) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: EIF3F

**Synonyms:** eIF3-p47; EIF3S5; MRT67

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RC201740 representing NM\_003754

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$ 

GCCGCGATCGCC

ATGGCCACACCGGCGGTACCAGTAAGTGCTCCTCCGGCCACGCCAACCCCAGTCCCGGCGGCGGCCCCAG CCTCAGTTCCAGCGCCAACGCCAGCACCGGCTGCGGCTCCGGTTCCCGCTGCGGCTCCAGCCTCATCCTC AGACCCTGCGGCAGCAGCGGCTGCAACTGCGGCTCCTGGCCAGACCCCGGCCTCAGCGCAAGCTCCAGCG CAGACCCCAGCGCCCGCTCTGCCTGGTCCTGCTCTTCCAGGGCCCTTCCCCGGCGGCCGCGTGGTCAGGC TGCACCCAGTCATTTTGGCCTCCATTGTGGACAGCTACGAGAGACGCAACGAGGGTGCTGCCCGAGTTAT CGGGACCCTGTTGGGAACTGTCGACAAACACTCAGTGGAGGTCACCAATTGCTTTTCAGTGCCGCACAAT CTCCAAATGAGCTCATCCTGGGCTGGTACGCTACGGGCCATGACATCACAGAGCACTCTGTGCTGATCCA TGAGTACTACAGCCGAGAGGCCCCCAACCCCATCCACCTCACTGTGGACACAAGTCTCCAGAACGGCCGC ATGAGCATCAAAGCCTACGTCAGCACTTTAATGGGAGTCCCTGGGAGGACCATGGGAGTGATGTTCACGC CTCTGACAGTGAAATACGCGTACTACGACACTGAACGCATCGGAGTTGACCTGATCATGAAGACCTGCTT TAGCCCCAACAGAGTGATTGGACTCTCAAGTGACTTGCAGCAAGTAGGAGGGGCATCAGCTCGCATCCAG GATGCCCTGAGTACAGTGTTGCAATATGCAGAGGATGTACTGTCTGGAAAAGGTGTCAGCTGACAATACTG TGGGCCGCTTCCTGATGAGCCTGGTTAACCAAGTACCGAAAATAGTTCCCGATGACTTTGAGACCATGCT CAACAGCAACATCAATGACCTTTTGATGGTGACCTACCTGGCCAACCTCACACAGTCACAGATTGCACTC AATGAAAAACTTGTAAACCTG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201740 representing NM\_003754

Red=Cloning site Green=Tags(s)

MATPAVPVSAPPATPTPVPAAAPASVPAPTPAPAAAPVPAAAPASSSDPAAAAAATAAPGQTPASAQAPA QTPAPALPGPALPGPFPGGRVVRLHPVILASIVDSYERRNEGAARVIGTLLGTVDKHSVEVTNCFSVPHN ESEDEVAVDMEFAKNMYELHKKVSPNELILGWYATGHDITEHSVLIHEYYSREAPNPIHLTVDTSLQNGR MSIKAYVSTLMGVPGRTMGVMFTPLTVKYAYYDTERIGVDLIMKTCFSPNRVIGLSSDLQQVGGASARIQ DALSTVLQYAEDVLSGKVSADNTVGRFLMSLVNQVPKIVPDDFETMLNSNINDLLMVTYLANLTQSQIAL NEKLVNL

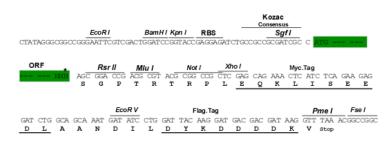
**SGPTRTRRL**EQKLISEEDLAANDILDYKDDDDK**V** 

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mg2847">https://cdn.origene.com/chromatograms/mg2847</a> c05.zip

**Restriction Sites:** Sgfl-Rsrll

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_003754

ORF Size: 1071 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 <a href="mailto:customer.com">customer.com</a> 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. <u>More info</u>



#### EIF3F (NM\_003754) Human Tagged ORF Clone - RC201740

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 003754.1, NP 003745.1</u>

 RefSeq Size:
 1274 bp

 RefSeq ORF:
 1074 bp

 Locus ID:
 8665

 UniProt ID:
 000303

 Cytogenetics:
 11p15.4

Domains: JAB\_MPN

**Protein Families:** Druggable Genome

**MW:** 37.4 kDa

**Gene Summary:** Component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis (PubMed:17581632, PubMed:25849773,

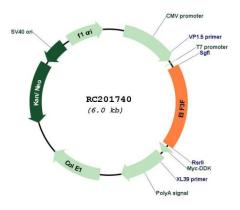
PubMed:27462815). The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 43S pre-

initiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of post-termination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation (PubMed:17581632). The eIF-3 complex specifically targets and initiates translation of a subset of mRNAs involved in cell proliferation, including cell cycling, differentiation and apoptosis, and uses different modes of RNA stem-loop binding to exert either translational

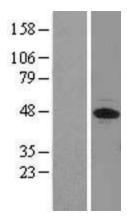
activation or repression (PubMed:25849773).[UniProtKB/Swiss-Prot Function]



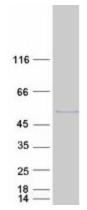
## **Product images:**



Circular map for RC201740



Western blot validation of overexpression lysate (Cat# [LY418450]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201740 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EIF3F protein (Cat# [TP301740]). The protein was produced from HEK293T cells transfected with EIF3F cDNA clone (Cat# RC201740) using MegaTran 2.0 (Cat# [TT210002]).