

## Product datasheet for RC201348

### EIF4EBP1 (NM\_004095) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** EIF4EBP1 (NM\_004095) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** EIF4EBP1  
**Synonyms:** 4E-BP1; 4EBP1; BP-1; PHAS-I  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC201348 representing NM\_004095  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCCGGGGCAGCAGCTGCAGCCAGACCCCAAGCCGGGCCATCCCCGCCACTCGCCGGGTGGTCTCG  
 GCGACGGCGTGCAGTCCC GCCGGGACTACAGCAGACCCCGCGGCAGCTCTTCAGCACACCCC  
 GGGAGGTACCAGGATCATCTATGACCGGAAATTCCTGATGGAGTGTGGAACTCACCTGTGACAAAACA  
 CCCCCAAGGGATCTGCCACCATTCCGGGGTACCAGCCCTCCAGTGTGAGCCCCCATGGAAGCCA  
 GCCAGAGCCACCTGCGCAATAGCCAGAAGATAAGCGGGCGGGCGGTGAAGAGTCACAGTTGAGATGGA  
 CATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC201348 representing NM\_004095  
 Red=Cloning site Green=Tags(s)  
 MSGSSCSQTPSRAIPATRRVVLGDGVQLPPGDYSTTPGGTLFSTTPGGTRIIYDRKFLMECRNSPVTKT  
 PPRDLPTIPGVTSPSSDEPPMEASQSHLRNSPEDKRAGGEESQFEMDI

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2585\\_a01.zip](https://cdn.origene.com/chromatograms/mg2585_a01.zip)

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**

**ACCN:**

NM\_004095

**ORF Size:**

354 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 [custsupport@origene.com](mailto:custsupport@origene.com) 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. [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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_004095.4](#)

**RefSeq Size:** 895 bp

**RefSeq ORF:** 357 bp

**Locus ID:** 1978

**UniProt ID:** [Q13541](#)

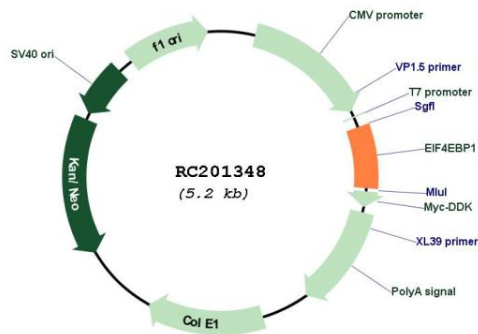
**Cytogenetics:** 8p11.23

**Protein Pathways:** Acute myeloid leukemia, ErbB signaling pathway, Insulin signaling pathway, mTOR signaling pathway

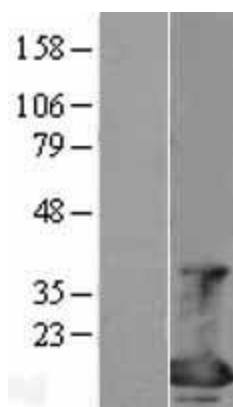
**MW:** 12.4 kDa

**Gene Summary:** This gene encodes one member of a family of translation repressor proteins. The protein directly interacts with eukaryotic translation initiation factor 4E (eIF4E), which is a limiting component of the multisubunit complex that recruits 40S ribosomal subunits to the 5' end of mRNAs. Interaction of this protein with eIF4E inhibits complex assembly and represses translation. This protein is phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC201348



Western blot validation of overexpression lysate (Cat# [LY401322]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201348 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).