

## Product datasheet for **RC211093**

### EIF3B (NM\_003751) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EIF3B (NM_003751) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EIF3B
Synonyms:	EIF3-ETA; EIF3-P110; EIF3-P116; EIF3S9; PRT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC211093 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCAGGACGCGGAGAACGTGGCGGTGCCCGAGGCGGCCGAGGAGCGCGCCGAGCCGGCCAGCAGCAGC  
CGGCCCGAGCCGCGCCAGCCGAGGGGCTGCTGCGGCCCGCGGGCCCGGCGCTCCGGAGGCCGCGGG  
GACCGAGGCCCTCAGTGAGGAGGTGGGGATCGCGGAGGCCGGCCGAGCCCGAGGTGAGGACCGAGCCG  
GCGGCCGAGGCAGAGCGGCCCTCCGGCCGTCCGAGTCCGCTCGCCGCGGCCGCGCCGAGGAGCTGCCCG  
GGTCGCATGCTGAGCCCCCTGTCCGGCACAGGGCGAGGCCCCAGGAGAGCAGGCTCGGGACGAGCGCTC  
CGACAGCCGGGCCAGGCGGTGTCCGAGGACGCGGGAGGAAACGAGGGCAGAGCGGCCGAGGCCGAACCC  
CGGGCGCTGGAGAATGGCGACGCGGACGAGCCCTCCTTCAGCGACCCGAGGACTTCGTGGACGACGTGA  
GCGAGGAAGAATTACTGGGAGATGTAACAAGATCGGCCCCAGGAAGCAGATGGAATCGATTCCGGTGAT  
TGTAGTGGACAATGTCCCTCAGGTGGGACCCGACCGACTTGAGAACTCAAAAATGTCATCCACAAGATC  
TTTTCAAAGTTTGGGAAAATCACAAATGATTTTTATCCTGAAGAGGATGGGAAGCAAAAAGGGTATATTT  
TCCTGGAGTACGCGTCCCTGCCACGCTGTGGATGCTGTGAAGAACGCCGACGGCTACAAGCTTGACAA  
GCAGCACACATTCGGGTCAACCTCTTTACGGATTTTGACAAGTATATGACGATCAGTGACGAGTGGGAT  
ATTCCAGAGAAACAGCCTTTCAAAGACCTGGGGAACCTTACGTTACTGGCTTGAAGAGGCAGAATGCAGAG  
ATCAGTACAGTGTGATTTTTGAGAGTGGAGACCGCACTTCCATATTCTGGAATGACGTA AAAAGACCTGT  
CTCAATTGAAGAAAGAGCGAGATGGACAGAGACGTATGTGCGTTGGTCTCCTAAGGGCACCTACCTGGCT  
ACCTTTTCATAAAGAGGCATTGCTCTATGGGGGGAGAGAAAATCAAGCAAATTCAGAGATTCAGCCACC  
AAGGGTTTCAGCTTATTGACTTTCACCTTGTGAAAGGTACCTGGTGACCTTTAGCCCTGATGGACAC  
GCAGGATGACCCTCAGGCCATAATCATCTGGGACATCCTTACGGGGCACAGAAGAGGGGTTTTCACTGT  
GAGAGCTCAGCCATTGGCCTATTTTTAAGTGGAGCCATGATGGCAAATTCCTTGGCAGAATGACCTGG  
ATACGCTTAGCATCTATGAAACTCCTTCTATGGGTCTTTTGGACAAGAAGAGTTTGAAGATCTCTGGGAT  
AAAAGACTTTTCTGGTCTCCTGGTGGTAACATAATCGCCTTCTGGTGCCTGAAGACAAAGATATTCCA  
GCCAGGGTAACCTGATGCAGCTCCCTACCAGGCAAGAGATCCGAGTGAGGAACCTGTTCAATGTGGTGG  
ACTGCAAGCTCCATTGGCAGAAGAACGGAGACTACTTGTGTGTAAGTAGATAGGACTCCGAAAGGCAC  
CCAGGGTGTGTACAAAATTTGAAATTTCCGAATGAGGGAGAAACAGGTACCTGTGGATGTGGTCCGAG  
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CTCCGCGGATATCTGTGTCTTTCTACCAGCTCAAAAACAACGGGAAGATTGAACTCATCAAGATGTTTCA  
CAAGCAGCAGGCGAACACCATCTTCTGGAGCCCCAAGGACAGTTCGTGGTGTGGCGGGCTGAGGAGT  
ATGAACGGTGCCTTAGCGTTTGTGGACACTTCGGACTGCACGGTCAATGAACATCGCAGAGCACTACATGG  
CTTCCGACGTGCAATGGGATCCTACTGGGCGCTACGTCGTACCTCTGTGTCTGGTGGAGCCATAAGGT  
GGACAACGCGTACTGGCTGTGGACTTCCAGGGACGCCTCCTGCAGAAGAACAACAAGGACCGCTTCTGC  
CAGCTGCTGTGGCGGCCCGCCCTCCACACTCCTGAGCCAGGAACAGATCAAGCAAATTA AAAAGGATC  
TGAAGAAATACTAAGATCTTTGAACAGAAGGATCGTTTGAGTCAGTCAAAGCCTCAAAGGAATTGGT  
GGAGAGAAGGCGCACCATGATGGAAGATTTCCGGAAGTACCGGAAAATGGCCAGGAGCTCTATATGGAG  
CAGAAAAACGAGCGCCTGGAGTTGCGAGGAGGGTGGACACTGACGAGCTGGACAGCAACGTGGACGACT  
GGGAAGAGGAGACCATTGAGTTCTCGTCACTGAAGAAATCATTCCCCTCGGGAATCAGGAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC211093 protein sequence  
Red=Cloning site Green=Tags(s)

MQDAENVAVPEAAEERAEPGQQQPAAEPPPAEGLLRPAGPGAPEAAGTEASSEEVGIAEAGPEPEVRTEP  
AAEAEAASGPSESPSPAAEELPGSHAEPVPAQGEAPGEQARDERSDSRAQAVSEDAGGNEGRAEAEAP  
RALENGDADEPSFSDPEDFVDDYSEEELLGDVLDKDRPQEAADGIDSVIVDNPVQVGPDRLEKLNVIHKI  
FSKFGKITNDFYPEEDGKTKGYIFLEYASPAHAVDAVKNADGYKLDKQHTFRVNLFTDFDKYMTISDEWD  
IPEKQPFKDLGNLRYWLEEAECRDQYSVIFESGDRTSIFWNDVKDPVSIERARWTETYVRWSPKGTyla  
TFHQRGIALWGGEKFKQIQRFHQGVQLIDFSPCERYLVTFSPMLDTQDDPQAIIIWDILTGHKRGRFHC  
ESSAHWPIFKWSHDGKFFARMTLDTLSIYETPSMGLLDKSLKISGKDFSWSPGGNIIAFWVPEDKDIP  
ARVTLMLQLPTRQEIRVRNLFNVVDCKLHWQKNGDYLCVKVDRTPKGTQGVVTFNFEIFRMREKQVPVDVVE  
MKETIIAFAWEPNGSKFAVLHGEAPRISVSFYHVKNNGKIELIKMFDKQQANTIFWSPQGQFVVLAGLRS  
MNGALAFVDTSDCTVMNIAEHYMASDVEWDPTGRYVVTSVSWWSHKVDNAYWLWTFQGRLLQKNNKDRFC  
QLLWRPRPPTLLSQEQIKQIKKDLKKYSKIFEQKDRLSQSKASKELVERRRTMMEDFRKYRQMAQELYME  
QKNERLELRGGVDTDELDSNVDDWEEETIEFFVTEEIIPLGNQE

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6809\\_a07.zip](https://cdn.origene.com/chromatograms/mk6809_a07.zip)

**Restriction Sites:** Sgfl-RsrII



**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\\_003751.4](#)

**RefSeq Size:** 3009 bp

**RefSeq ORF:** 2445 bp

**Locus ID:** 8662

**UniProt ID:** [P55884](#)

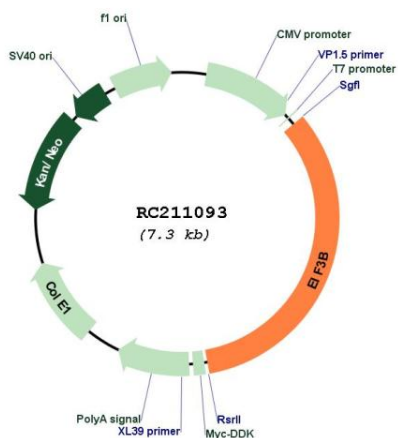
**Cytogenetics:** 7p22.3

**Domains:** RRM

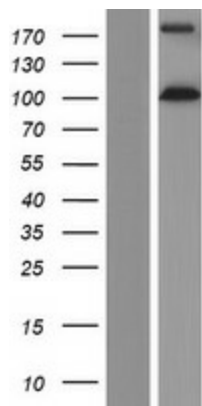
**MW:** 92.5 kDa

**Gene Summary:** RNA-binding component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis (PubMed:9388245, 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-tRNA<sub>i</sub> 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:9388245, 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]

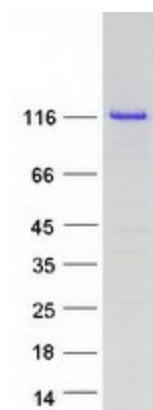
Product images:



Circular map for RC211093



Western blot validation of overexpression lysate (Cat# [LY418454]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211093 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EIF3B protein (Cat# [TP311093]). The protein was produced from HEK293T cells transfected with EIF3B cDNA clone (Cat# RC211093) using MegaTran 2.0 (Cat# [TT210002]).