

## Product datasheet for **RR211383**

### Eif3b (NM\_001031640) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eif3b (NM_001031640) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eif3b
Synonyms:	Eif3s9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RR211383 representing NM\_001031640  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCAGGACGCTGAGAACGTGGCGGCCCGAGGCGGCCGAGGAGCGGGCCGAGCCCGAGGCAGCAGC  
 CGGTCTCCGAGTACCGCCGACGACGAGGCGGCAGGGTCTGGCGGTCCGAAGTGGGGCGGACGGAAGA  
 CGCCGAGGAAGACGCGGAGGCCAGACCGGAGCCGAGGTGAGGGCCAAGCCGGCGCCCAATCCGAAGAG  
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 CGCGGCCGAGGCGGAGCCGCGGGCTCTGGAGAACGGAGAGGCAGATGAGCCCTCCTTCAGCGACCCCGAG  
 GATTCGTAAGACGAGTGTAGCGAGGAAGAACTACTTGGTGTACTCAAAGATCGGCCCTCAGGAAGCGG  
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 GAAGTCAGGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR211383 representing NM\_001031640  
Red=Cloning site Green=Tags(s)

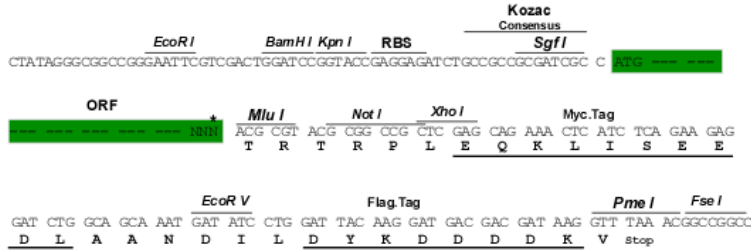
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FARMTLDTLSIYETPSMGLLDKKS LKISGIKDFSWSPGGNIIAFWVPEDKDIPARV TLMQLPTRQEIRVR  
NLFNVVDCKLHWQKNGDYL CVKVDRTPKGTQGVV TNFEIFRMREKQVPVDV VEMKETIIAF AWEPNGSKF  
AVLHGEAPRISVSFYHVKSNGKIELIKMFDKQQANTIFWSPQGFVVLAGLRSMNGALAFVDTSDCTVMN  
IAEHYMASDVEWDPTGRYVVT SVSWWSHKVDNAYWLWTFQGRL LQKNNKDRFCQLLWRPRPPTLLSQDQI  
KQIKKDLKKYSKIFEQKDRLSQSKASKELVERRRTMMEDFRQYRKMAQEL YMKQKNERLELRGGVDTDEL  
DSNVDDWEEETIEFFVTEEVIPLGSQE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001031640

**ORF Size:** 2391 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\\_001031640.1](#), [NP\\_001026810.1](#)

**RefSeq Size:** 2948 bp

**RefSeq ORF:** 2394 bp

**Locus ID:** 288516

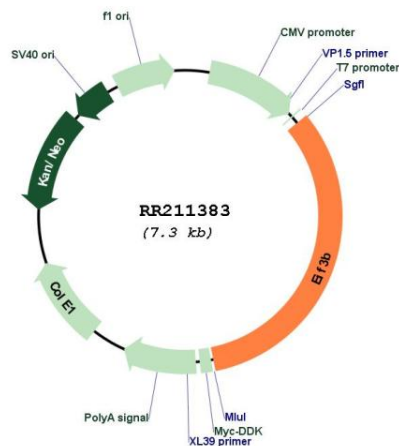
**UniProt ID:** [Q4G061](#)

**Cytogenetics:** 12q11

**MW:** 90.9 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. The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNA<sup>i</sup> 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. 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.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RR211383