

## Product datasheet for **RG204788**

### EIF3E (NM\_001568) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EIF3E (NM_001568) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EIF3E
Synonyms:	eIF3-p46; EIF3-P48; EIF3S6; INT6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG204788 representing NM\_001568  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGAGTACGACTTGACTACTCGCATCGCGCACTTTTGGATCGGCATCTAGTCTTTCCGCTTCTTG  
 AATTTCTCTGTAAAGGAGATATAAATGAAAAGGAATTATTACAAGGTAATTTGGACCTTCTTAGTGA  
 TACCAACATGGTAGACTTTGCTATGGATGTATACAAAAACCTTTATTCTGATGATATTCCTCATGCTTTG  
 AGAGAGAAAAGAACCACAGTGGTTGCACAACGAAACAGCTTCAGGCAGAAAACAGAACCAATTGTGAAGA  
 TGTTTGAAGATCCAGAACTACAAGGCAATGCAGTCAACCAGGGATGGTAGGATGCTCTTTGACTACCT  
 GGCGGACAAGCATGGTTTTAGGCAGGAATTTAGATACACTCTACAGATATGCAAAATTCAGTACGAA  
 TGTGGGAATTACTCAGGAGCAGCAGAATATCTTTATTTTTTTAGAGTGTGGTCCAGCAACAGATAGAA  
 ATGCTTTAAGTTCCTCTGGGAAAGCTGGCCTCTGAAATCTTAATGCAGAATGGGATGCAGTCTGGA  
 AGACCTTACACGGTTAAAAGAGACCATAGATAAATTTCTGTGAGTTCTCCACTTCAGTCTTTCAGCAG  
 AGAACATGGCTCATTCACTGGTCTCTGTTTGTCTTCAATCACCCAAAGGTCGCGATAATATTATTG  
 ACCTCTTCTTTATCAGCCACAATATCTTAATGCAATTCAGACAATGTGTCCACACATTCTTCGCTATTT  
 GACTACAGCAGTCATAACAAACAAGGATGTTCCGAAACGTCGGCAGGTTCTAAAAGATCTAGTTAAAGTT  
 ATTC AACAGGAGTCTTACACATATAAAGACCCAATTACAGAATTTGTTGAATGTTTATATGTTAACTTTG  
 ACTTTGATGGGGCTCAGAAAAAGCTGAGGGAATGTGAATCAGTGTGTTGTAATGACTTCTTCTTGGTGGC  
 TTGTCTTGAGGATTTCAATGAAAATGCCCGTCTCTTCAATTTGAGACTTCTGTGCGATCCACCAGTGT  
 ATCAGCATTAACATGTTGGCAGATAAATGAAATGACTCCAGAAGAAGCTGAAAGGTGGATTGTAATTT  
 TGATTAGAAATGCAAGACTGGATGCCAAGATTGATTCTAAATAGGTCATGTGGTTATGGGTAACAATGC  
 AGTCTCACCCCTATCAGCAAGTGATTGAAAAGACCAAAAGCCTTTCTTTAGAAAGCCAGATGTTGGCCATG  
 AATATTGAGAAGAACTTAATCAGAATAGCAGGTGAGGCTCCTAACTGGGCAACTCAAGATTCTGGCT  
 TCTAC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG204788 representing NM\_001568  
 Red=Cloning site Green=Tags(s)

MAEYDLTTRIAHFLDRHLVFPLLEFLSVKEIYNEKELLQGKLDLLSDTNMVDFAVDVYKNLYSDDIPHAL  
 REKRRTTVVAQLKQLQAETEPIVKMFEDPETTRQMSTRDGRMLFDYLADKHGFRQEYLDLYRYAKFQYE  
 CGNYSGAAEYL YFFRVL VPATDRNAL SSLWGKLASEILMQNWDVAVMEDLTRLKETIDNNSVSSPLQSLQQ  
 RTWL IHWSL FVFNHPKGRDNI IDLFL YQPQYLNAIQTMCPHILRYLTTAVITNKDVRKRRQVLKDLVKV  
 IQQESYTYKDPITEFVECLYVNFDFDGAQKKLRECESVLVNDFFLVACLEDFIENARLFI FETFCRIHQ  
 ISINMLADKLNMTPEEAERWIVNLI RNARLDAKIDSKLGHVVMGNNAVSPYQQVIEKTKSLSFRSQMLAM  
 NIEKKNQNSRSEAPNWTQDSGFY

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001568

**ORF Size:** 1335 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\\_001568.2](#), [NP\\_001559.1](#)

**RefSeq Size:** 1516 bp

**RefSeq ORF:** 1338 bp

**Locus ID:** 3646

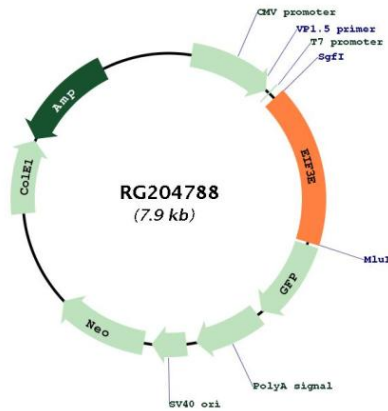
**UniProt ID:** [P60228](#)

**Cytogenetics:** 8q23.1

**Domains:** PCI

**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-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 (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). Required for nonsense-mediated mRNA decay (NMD); may act in conjunction with UPF2 to divert mRNAs from translation to the NMD pathway (PubMed:17468741). May interact with MCM7 and EPAS1 and regulate the proteasome-mediated degradation of these proteins (PubMed:17310990, PubMed:17324924).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RG204788