

Product datasheet for **RG206690**

IF3EI (EIF3L) (NM_016091) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	IF3EI
Synonyms:	EIF3EIP; EIF3S6IP; EIF3S11; HSPC021; HSPC025; MSTP005
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG206690 representing NM_016091
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTCTTATCCCGCTGATGATTATGAGTCTGAGGCGGCTTATGACCCCTACGCTTATCCAGCGACTATG
 ATATGCACACAGGAGATCCAAAGCAGGACCTTGCTTATGAACGTCAGTATGAACAGCAAACCTATCAGGT
 GATCCCTGAGGTGATCAAAAATTCATCCAGTATTTCCACAAAATGTCTCAGATTTGATTGACCAGAAA
 GTGTATGAGCTACAGGCCAGTCGTGTCTCCAGTGATGTCATTGACCAGAAGGTGTATGAGATCCAGGACA
 TCTATGAGAACAGCTGGACCAAGCTGACTGAAAGATTCTTCAAGAATACACCTTGGCCCGAGGCTGAAGC
 CATTGCTCCACAGGTTGGCAATGATGCTGTCTTCTGATTTTATACAAAAGAAATTATACTACAGGCACATA
 TATGCCAAAGTCAGTGGGGACCTTCTTGGAGCAGAGGTTTGAATCCTATTACAACACTACTGCAATCTCT
 TCAACTACATTCTTAATGCCGATGGTCTGCTCCCTTGAACACCAACAGTGGCTCTGGGATATTAT
 CGATGAGTTTATCTACAGTTTCAGTCATTGATCAGTACCGCTGTAAGACTGCCAAGAAGTCAGAGGAG
 GAGATTGACTTTCTCGTTCCAATCCAAAATCTGGAATGTTTATAGTGTCTCAATGTCCTTCATTCCC
 TGGTAGACAAATCCAACATCAACCGACAGTTGGAGGTATACACAAGCGGAGGTGACCTGAGAGTGTGGC
 TGGGGAGTATGGGCGGCACTCCCTCTACAAAATGCTTGGTTACTTCAGCCTGGTCGGGCTTCTCCGCCTG
 CACTCCCTGTTAGGAGATTACTACAGGCCATCAAGGTGCTGGAGAATCGAACTGAACAAGAAGAGTA
 TGTATTCCCGTGTGCCAGAGTGCCAGGTACCACATACTATTATGTTGGGTTTGCATATTTGATGATGCG
 TCGTTACCAGGATGCCATCCGGGTCTTCGCCAACATCCTCTACATCCAGAGGACCAAGAGCATGTTT
 CAGAGGACCACGTACAAGTATGAGATGATTAACAAGCAGAATGAGCAGATGCATGCGCTGCTGGCCATTG
 CCCTCACGATGTACCCATGCGTATCGATGAGAGCATTACCTCCAGCTGCGGGAGAAATATGGGGACAA
 GATGTTGCGCATGCAGAAAGGTGACCCACAAGTCTATGAAGAACTTTTCAGTTACTCCTGCCCAAGTTC
 CTGTCGCCTGTAGTGCCCAACTATGATAATGTGCACCCCAACTACCACAAGAGCCCTTCTGCAGCAGC
 TGAAGGTGTTTTCTGATGAAGTACAGCAGCAGGCCAGCTTCAACCATCCGACGTTCTGAAAGCTCTA
 CACCACCATGCCTGTGGCCAAGCTGGCTGGCTTCTGGACCTCACAGAGCAGGAGTTCCGGATCCAGCTT
 CTGTCTTCAAAACACAAGATGAAGAACCTCGTGTGGACCAGCGGTATCTCAGCCCTGGATGGTGAATTTT
 AGTCAGCCTCAGAGGTTGACTTCTACATTGATAAGGACATGATCCACATCGCGGACACCAAGGTCGCCAG
 GCGTTATGGGGATTTCTTCATCCGTCAGATCCACAAATTTGAGGAGCTTAATCGAACCTGAAGAAGATG
 GGACAGAGACCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG206690 representing NM_016091
 Red=Cloning site Green=Tags(s)

MSYPADDYESEAAYDPYAYPSDYDMHTGDPKQDLAYERQYEQTYQVIPEVIKNFIQYFHKTVSDLIDQK
 VYELQASRVSSDVIDQKVEIQDIYENSWTKLTERFFKNTPWPEAEAIAPQVGNDVFLILYKELYRHI
 YAKVSGGPSLEQRFESYNYCNLFNYILNADGPAPLELPNQWLWDIIDEFIYQFSFSQYRCKTAKKSEE
 EIDFLRSNPKIWNVHSLNVLHSLVDKSNINRQLEVYTSGGDPESVAGEYGRHSLYKMLGYFSLVGLRL
 HSLLDYYQAIKVLNIELNKKSMYSRVPECQVTYYVGFAYLMMRRYQDAIRVFANILLIYIQRKSMF
 QRTTYKYEMINKQNEQMHALLAIALTMYPMRIDESIHLQLREKYGDKMLRMQKGPQVVEELFSYSCPKE
 LSPVVPNYDNVHPNYHKEPFLQQLKVSDEVQQAQLSTIRSFLKLYTMPVAKLAGFLDLTEQEFRIQL
 LVFKHKMKNLVWTSGISALDGEFQSASEVDIFYIDKDMIHIADTKVARRYGDFFIHQIHKFEELNRTLKMK
 GQRP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016091

ORF Size: 1692 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.

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

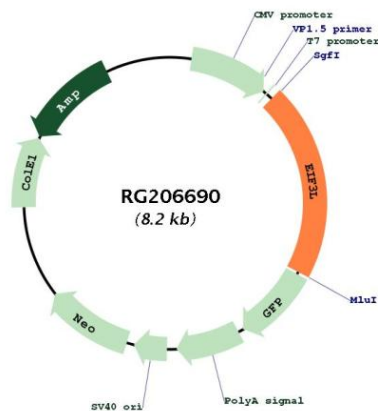
RefSeq: [NM_016091.1](#)

RefSeq Size: 1970 bp

RefSeq ORF: 1695 bp
Locus ID: 51386
UniProt ID: [Q9Y262](#)
Cytogenetics: 22q13.1

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 RG206690