

## Product datasheet for **RG236420**

### EIF4EL3 (EIF4E2) (NM\_001276337) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** EIF4EL3 (EIF4E2) (NM\_001276337) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** EIF4EL3  
**Synonyms:** 4E-LP; 4EHP; EIF4EL3; h4EHP; IF4e  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG236420 representing NM\_001276337.  
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTGAAACCGTCAGAATTTGTAAACGACTCACTATAGGGCCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAACAACAAGTTCGACGCTTTGAAAGATGATGACAGTGGGACCATGATCAGAATGAAGAAAACAGC
ACACAGAAAGATGGTGAGAAGGAAAAACGGAACGAGACAAGAATCAGAGCAGTAGCAAGAGAAAGGTG
GAGCAGTTCTGGAGTTTTATAGCCACATGGTACGTCTGGGACCTGACAGGCCACAGTGACTTCCAT
CTCTTCAAAGAAGGAATTAACCCATGTGGGAGGATGATGCAAAATAAAATGGTGGCAAGTGATTATT
CGGCTGCCGAAGGGCTTGGCCTCCCGTTGCTGGGAGAATCTCATTTGGCCATGCTGGGGGAACAGTTC
ATGTTGGGAGGAGATCTGTGGGCTGTGGTGTCTGTCCGTTTCAGGAAGACATTATTCAATATGG
AATAAGACTGCCAGTGACCAAGCAACCACAGCCCGAATCCGGGACACACTTCGGCGAGTGCTTAACCTA
CCTCCCAACACCATTATGGAATACAAAACCTCACACCGACAGCATCAAGGACAATTCAAGCTTTCGAAAT
ACAAAAATCACATTG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG236420  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MNNKFDALKDDDSGDHDQNEENSTQKDGEKEKTERDKNQSSSKRKVEQFWRFYSHMVRPGDLTGHSDFH
LFKEGIKPMWEDDANKNGGKIIRLRKGLASRCWENLILAMLGEQFMVGEEICGAVVSVRFQEDIISIW
NKTASDQATTARIRDTLRRLVNLPPNIMEYKTHDTSIKDNSSFRNKTIL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPISILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_001276337

**ORF Size:** 567 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).

**RefSeq:** [NM\\_001276337.1](#), [NP\\_001263266.1](#)

**RefSeq Size:** 3416 bp

**RefSeq ORF:** 570 bp

**Locus ID:** 9470

**Cytogenetics:** 2q37.1

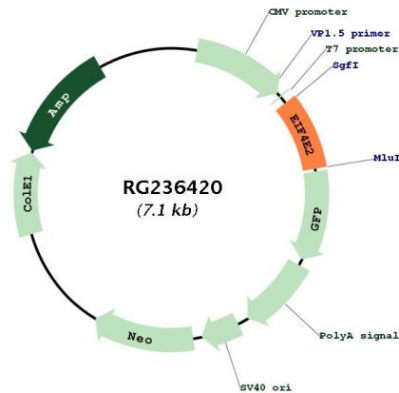
**Protein Families:** Transcription Factors

**Protein Pathways:** Insulin signaling pathway, mTOR signaling pathway

**MW:** 22.4 kDa

**Gene Summary:**

Recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation (PubMed:9582349, PubMed:17368478, PubMed:25624349). Acts as a repressor of translation initiation (PubMed:22751931). In contrast to EIF4E, it is unable to bind eIF4G (EIF4G1, EIF4G2 or EIF4G3), suggesting that it acts by competing with EIF4E and block assembly of eIF4F at the cap (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**

Circular map for RG236420