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Product datasheet for RG201391

EIF4EL3 (EIF4E2) (NM_004846) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EIF4EL3 (EIF4E2) (NM_004846) 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:

>RG201391 representing NM_004846
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAACAACAAGTTCGACGCTTTGAAAGATGATGACAGTGGGGACCATGATCAGAATGAAGAAAACAGCA
CACAGAAAGATGGTGAGAAGGAAAAAACGGAACGAGACAAGAATCAGAGCAGTAGCAAGAGAAAGGCTGT
TGTCCCTGGACCGGCAGAGCATCCCCTGCAGTACAACTACACTTTTTGGTACTCCAGGAGAACCCCCGGC
CGTCCCACGAGCTCACAGAGCTATGAACAGAATATCAAACAGATTGGCACCTTTGCCTCTGTGGAGCAGT
TCTGGAGGTTTTATAGCCACATGGTACGTCCTGGGGACCTGACAGGCCACAGTGACTTCCATCTCTTCAA
AGAAGGAATTAAACCCATGTGGGAGGATGATGCAAATAAAAATGGTGGCAAGTGGATTATTCGGCTGCGG
AAGGGCTTGGCCTCCCGTTGCTGGGAGAATCTCATTTTGGCCATGCTGGGGGAACAGTTCATGGTTGGGG
AGGAGATCTGTGGGGCTGTGGTGTCTGTCCGCTTTCAGGAAGACATTATTTCAATATGGAATAAGACTGC
CAGTGACCAAGCAACCACAGCCCGAATCCGGGACACACTTCGGCGAGTGCTTAACCTACCTCCCAACACC
ATTATGGAATACAAAACTCACACCGACAGCATCAAAATGCCAGGCAGGCTGGGCCCCCAAAGGCTCCTTT
TTCAAAACCTCTGGAAGCCGCGGTTGAATGTGCCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

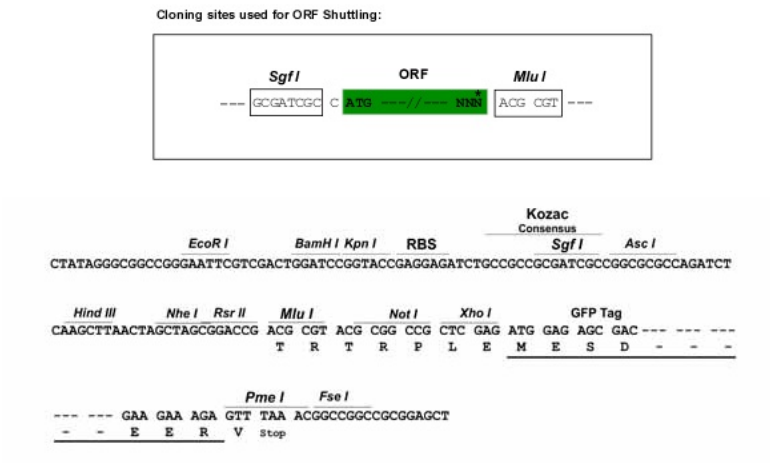
>RG201391 representing NM_004846
Red=Cloning site Green=Tags(s)

MNNKFDALKDDDSGDHDQNEENSTQKDGEKEKTERDKNQSSSKRKAVVPGPAEHPLQYNYTFWYSRRTPG
RPTSSQSYEQNIKQIGTFASVEQFWRFYSHMVRPGDLTGHSDFHLFKEGIKPMWEDDANKNGGKWIIRLR
KGLASRCWENLILAMLGEQFMVGEEICGAVVSVRFQEDIISIWNKTASDQATTARIRDTLRRVLNLPPNT
IMEYKTHTDSIKMPGRLGPQRLLFQNLWKPRLNVP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004846

ORF Size: 735 bp

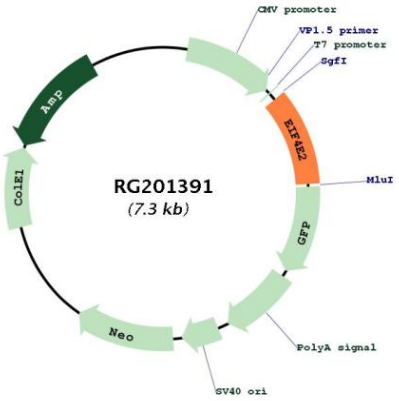
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_004846.4
RefSeq Size:	1014 bp
RefSeq ORF:	738 bp
Locus ID:	9470
UniProt ID:	O60573
Cytogenetics:	2q37.1
Domains:	IF4E
Protein Families:	Transcription Factors
Protein Pathways:	Insulin signaling pathway, mTOR signaling pathway
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 RG201391