

## Product datasheet for **MR216864**

### Eif4e2 (NM\_023314) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Eif4e2 (NM\_023314) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Eif4e2  
**Synonyms:** 2700069E09Rik; AI036339; AV129531; D0H0S6743E; Eif4el3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR216864 representing NM\_023314  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAACAACAAGTTCGACGCCTTAAAAGATGATGACAGTGGAGACCATGATCAGAATGAAGAAAACAGCA  
CACAGAAAGATGGTGAGAAGGAAAAACAGACCGAGACAAGAGCCAGAGCAGTGGCAAGAGGAAGGCTGT  
TGTCCTGGACCAGCAGAGCATCCCTGCAGTACAACACCTTTTGGTACTCGAGGAGAACCCCTGGC  
CGTCCCACCAGCTCGCAGAGCTATGAGCAGAACATCAAGCAGATTGGCACCTTTGCCTCTGTGGAGCAGT  
TCTGGAAGTTTTACAGCCACATGGTACGTCCTGGGGACCTGACAGGCCACAGTGACTTTTCATCTCTCAA  
AGAAGGGATTAACCTATGTGGGAGGATGATGCAAATAAAAAATGGGGCAAGTGGATCATTTCGACTCCGG  
AAGGGCTTAGCTTCCCGCTGCTGGGAGAATCTCATCTGGCTATGCTCGGGGAGCAATTCATGGTTGGGG  
AGGAGATCTGCGGGCTGTGGTCTCTGTCCGCTTTCAGGAGGACATTATTTCTATATGGAATAAGACTGC  
CAGCGACCAAGCAACTACAGCCGAATCCGGGATACTCTTCGGCGCGTGCTTAACCTACCTCCCAACACC  
ATTATGGAATACAAAACACACCGACAGCATCAAGGACAATCAAGCTTTCGAAATACAAAATCACAT  
TG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR216864 representing NM\_023314  
 Red=Cloning site Green=Tags(s)

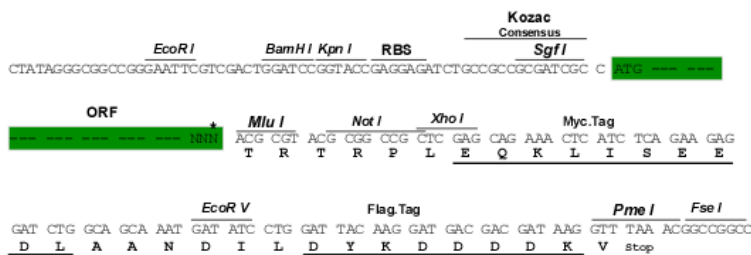
MNNKFDALKDDDSGDHDQNEENSTQKDGEKEKTDRDKSQSSGKRKAVVPGPAEHPLQYNYTFWYSRRTPG  
 RPTSSQSYEQNIKQIGTFASVEQFWKFYSHMVRPGDLTGHSDFHLFKEGIKPMWEDDANKNGGKWIIRLR  
 KGLASRCWENLILAMLGEQFMVGEEICGAVVSVRFQEDIISIWNKTASDQATTARIRDTLRRVNLNLPNT  
 IMEYKHTHTDSIKDNSSFRNTKITL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_023314

**ORF Size:** 702 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\\_023314.3](#), [NP\\_075803.2](#)

**RefSeq Size:** 3394 bp

**RefSeq ORF:** 705 bp

**Locus ID:** 26987

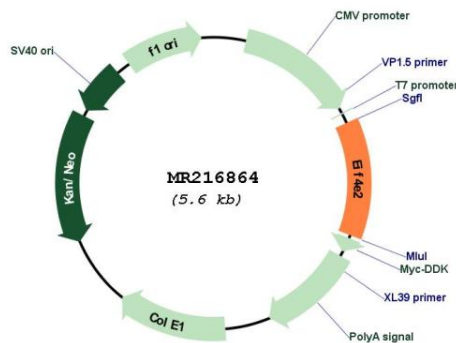
**UniProt ID:** [Q8BMB3](#)

**Cytogenetics:** 1 C5

**MW:** 27.4 kDa

**Gene Summary:** Recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation (PubMed:15153109). Acts as a repressor of translation initiation (By similarity). 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 (PubMed:15153109). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR216864