

## Product datasheet for **MR202404**

### Eif4e (BC085087) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eif4e (BC085087) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eif4e
Synonyms:	Eif4e-ps, eIF-4E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202404 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGACTGTGGAACCGGAAACCACCCCTACCACTAATCCCCACCTGCAGAAGAGGAAAAACAGAGT  
CTAATCAGGAGGTTGCTAACCCAGAGCACTATATTAACACCCTCTACAGAACAGGTGGCACTCTGGTT  
TTTTAAAAATGATAAAAGCAAACCTGGCAAGCAAACCTTCGATTGATCTCTAAGTTTGACTGTTGAA  
GACTTTTGGGCTCTATAACAACATCCAGTTGTCTAGTAATTTAATGCCTGGCTGTGACTACTCACTTT  
TTAAGGACGGGATTGAGCCTATGTGGGAAGATGAGAAAAACAAACGAGGAGGACGGTGGCTGATCAGCT  
GAACAAGCAGCAGAGACGGAGTGACCTCGATCGCTTCTGGCTAGAGACTGCTGTGCCTTATTGGAGAA  
TCTTTCGATGACTACAGTGATGATGTGTGTGGAGCTGTTGTTAATGTTAGAGCTAAAGGTGATAAGATAG  
CAATATGGACTACTGAGTGTGAAAAACAGAGATGCAGTCACACACATAGGGAGGGTATACAAGGAAAGGTT  
AGGACTTCCTCCGAAGATAGTGATTGGTTATCAGTCCCACGCAGACACAGCTACAAGAGCGGCTCCACC  
ACTAAAAATAGGTTTGTGTT

**ACGCGT**ACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >MR202404 protein sequence  
Red=Cloning site Green=Tags(s)

MATVEPETPTTNPPEEEKTESNQEVANPEHYIKHPLQNRWALWFFKNDKSKTWQANLRLISKFDTVE  
 DFWALYNHIQLSSNLMPGCDYSLFKDGIPEMWEDEKNKRGRWLITLNKQRRSDLDRFWLETLLCLIGE  
 SFDDYSDDVCGAVVNRKAGDKIAIWTTECENRDAVTHIGRVYKERLGLPPKIVIGYQSHADTATKSGST  
 TKNRFVV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** BC085087

**ORF Size:** 651 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:** [BC085087](#), [AAH85087](#)

**RefSeq Size:** 2366 bp

**RefSeq ORF:** 653 bp

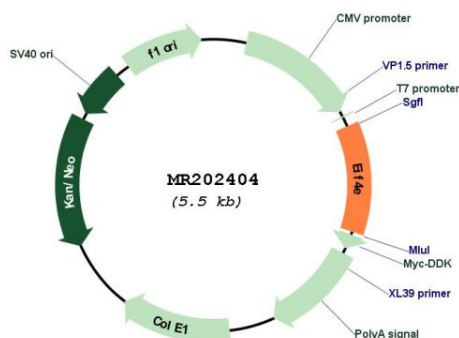
**Locus ID:** 13684

**Cytogenetics:** 3 64.3 cM

**MW:** 25.1 kDa

**Gene Summary:** This gene encodes a component of the eukaryotic translation initiation factor 4F complex, which recognizes the 7-methylguanosine cap structure at the 5' end of messenger RNAs. The encoded protein aids in translation initiation by recruiting ribosomes to the 5'-cap structure. Association of this protein with the 4F complex is the rate-limiting step in translation initiation. This gene acts as a proto-oncogene, and its expression and activation is associated with transformation and tumorigenesis. It has also been associated with autism spectrum disorders. Consistently, knockout of this gene results in increased translation of neurologins, postsynaptic proteins linked to autism spectrum disorders. Pseudogenes of this gene are found on other chromosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

### Product images:



Circular map for MR202404