

## Product datasheet for RC229052

### EIF4ENIF1 (NM\_001164501) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EIF4ENIF1 (NM_001164501) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EIF4ENIF1
Synonyms:	4E-T; Clast4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229052 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATAGGAGAAGTATGGGTGAAACAGAAAGTGGAGATGCTTTCCTTGACCTGAAGAAGCCTCCTGCCT  
CCAAATGCCCCCATCGCTATACAAAAGAAGAAGCTTTGGATATAAAAAGAACTCCCCATTCCAAACAGAG  
GCCTTCATGCCTTCTGAAAAATATGACAGTGTGGTGTCTGGGACCCTGAGAAGTGGCATGCCTCTCTC  
TACCCAGCTTCAGGGCGGAGCTCACCAGTGGAAAGTCTGAAGAAAGATGGATACAGACCGCCTTCCC  
TGGTGCAGGATAGTAGATCCACGAGAGCGTGTGAAAGAAGATGACTTAGATGTTGTTCTCAGCCCTCA  
GAGACGGAGCTTTGGAGGGGGCTGCCACGTGACAGCCGCTGTTAGCTCCCGGCGCTCAGGAAGTCCATTA  
GAGAAAGATAGTATGGGCTTCGTCGCTTGGTGGACGTAGGATTGGCAGTGGGAGGATAATCTCTGCC  
GGACCTTTGAGAAGGATCACCGTCTTAGCGATAAGGACCTGCGGGACTTGAGAGACAGAGACCGAGAGAG  
GGACTTCAAGGACAAGCGTTTCAGGAGAGAGTTTGGAGATAGTAAGCGTGTCTTTGGTGAGCGTAGAAGA  
AATGATTCTTACACAGAAGAAGAACCAGAGTGGTCTCTGCTGGACCCACAAGTCAGTCTGAAACCATCG  
AACTGACTGGCTTTGATGATAAGATACTAGAAGAAGATCACAAGGGAGAAAAAGAACAAGGCGACGGAC  
AGCCTCTGTGAAGGAAGGTATAGTAGAGTGCAATGGAGGAGTGGCCGAAGAGGATGAAGTGGAGGTCATC  
CTTGACAGGAGCCTGCGGCTGATCAGGAAGTCCAAGGGATGCTGTCTTGCTGAGCAGTCCCCAGGAG  
ACTTTGACTTTAATGAGTTCCTTAACTTGATAAGGTGCCATGCTTGGCTTCGATGATAGAAGATGTTTT  
GGGAGAAGGGTCACTCTGCCAGTCCGTTCACTAGGTGGTCTCTAACCAGCAGATCAGGAAGCCGA  
TCCAGCAGTCTTGGGTCAACACCACATGAAGAGCTAGAGAGACTTGCAGGTCTGGAGCAAGCCATCTCT  
CTCCTGGACAGAACTCGGGGAATTACTTTGCTCTATACCATTGGAAGACCATGCTGAAAAATAAGTGG  
TATTTTAGAAATGCTACAGAAAGCCAAAGTGGATTTGAAACCTCTTCTTCCAGCCTTTCTGCAATAAA  
GAAAAACTTAAAGAAAGCTCACATTCAGGGTTGTGCTTTCAGTGGAGGAGGTAGAAGCAGGTCTGAAGG  
GCTTGAAGGTTGACCAGCAAGTGAAGAATCAACTCCCTCATGGCAGAACACCTAGAAGAGACCTTGAG  
TGCCGTAACCAACATCGACAACGAAGAAAGACGGAGACATGACTGCGTTCAACAAGCTAGTGAGCACA



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ATGAAGGCAAGTGGGACTTTGCCTTCTCAGCCCAAAGTCAGCCGAAACCTTGAAAGCCATTTGATGTCCC  
 CTGCTGAGATTCCAGGCCAGCCTGTCCCTAAGAACATCCTGCAGGAACCTCTGGGTCAACAGTTGAGAG  
 ACCTGCTTCTTCCAATCTTCTGAGTGGCCTTATGGGGAGCTTGGAGCCTACAACATCTTTACTGGCCAA  
 AGAGCACCTCTCCTCCCTTGTACAGGTGTTTCAAACCTGAGCAGCCTCAGTGACTACCTTCGCCCAA  
 GAATACCATCACCAATTGGTTTACACCCAGGACCACAGCAGCTACTCGGAGATCCATTCCAAGGCATGCG  
 CAAACCCATGAGCCCCATCACAGCCAGATGAGCCAGCTGGAGTTGCAACAGGCAGCTTTAGAAGGGCTG  
 GCCTTGCCACATGACCTTGTGTACAGGCAGCAAACCTTACCAGCCTGGTTTTGGCAAACACAGGTGG  
 ACAGAACCAGAGATGGATTGAGAAACAGGCAACAGCGAGTGACCAAGTACCAGCACCCGTGCATCGAGG  
 GAATTCCTCTTCCCCTGCCCTGTGCCTCCATACAAGCATGCTTTCTCCTTCTTTACCCCTACCTCA  
 GTGATTCGTAAGATGTACGAGAGCAAAGAGAAAAGCAAGGAGGAGCCAGCATCTGAAAAGCAGCTCTTG  
 GTGACAGTAAAGAGGATACTCAGAAGGCCAGTGAAGAAAACCTCCTGTATCCAGCTCTGTACCCAGTGC  
 CGATCGAGACTCTTCCCCTACAAAATCCAACTGTCAGCATTACAGAGGTCTTCGTGTTCCACCCCA  
 CTGTCCCAGGCCAACCGTTACACCAAAGAACAAGATTATCGACCTAAAGCAACTGGGAGAAAAACCCCA  
 CCTTGGCATCCCAGTTCCTACAACACCTTTTCTCCGCCCTGTCCACCAAGTCCCCTTGTCCCCATGT  
 CCCTATGGTTAGGCCTGCTCACCAGGCTTACCCAGGGTTGGTACAGAGGATGCTGGCCAGGGAGTACAT  
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 GAATATCTGGCCCCATCCTGGGTGAGCCCTTTTACCCTTACCTGCTGCTAGTACCCTCTCTTAAACCC  
 TCGTCTGGAACACCTCTGCATCTGGCAATGGTGAACAGCAGCTACAGCGCTCAGTTCTGCATCCTCCA  
 GGCTCTGGTTCCCATGCAGCAGCTGTCAGCGTTACAGAACCCCTCAGAACGTGCCAGCCGGTCAAGGC  
 TGCCCCACATGCACTCCCAGCTGGAGCATCGCCCCAGCCAGAGGAGCAGCTCCCCTGTGGGCTTGCCAA  
 ATGGTTTGGCTCAGATGTGCTACAGCAACCCCTGCCCTCCATGCCCGCAAAGTTATCAGTGTAGATGAA  
 TTGGAATACCGACAG

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATTAAGGTTTAA

**Protein Sequence:**

>RC229052 protein sequence  
 Red=Cloning site Green=Tags(s)

MDRRSMGETESGDAFLDLKPPASKCPHRYTKEELLDIKELPHSKQRPSCLEKYDSDGVWDPEKWHASL  
 YPASGRSSPVESLKKELDTDRPSLVRRIVDPREVRKEDDLDVVLSPQRRSFGGGCHVTAAVSSRRSGSPL  
 EKDSDDLRLGGRRIGSGRIISARTFEKDHRLSDKDLRDLRDRDRERDFDKRFRREFGDSKRVFGERRR  
 NDSYTEEEPEWFSAGPTSQSETIELTGFDDKILEEDHKGRKRTRRRRTASVKEGIVECNGGVAEEDEVEVI  
 LAQEPAADQEVPRDAVLEQSPGDFDFNEFFNLKVPCLASMIEDVLGEGSVSASRFSRWFNPSRSRSGR  
 SSSLGSTPHEELERLAGLEQAILSPGQNSGNYFAPIPLEDHAENKVDILEMLQKAKVDLKPILLSSLANK  
 EKLKESHSVGVLSVEEVEAGLGLKVDQVKNSTPFMAEHLLETL SAVTNNRQLKKGDMTAFNKL VST  
 MKASGTLPSQPKVSRNLESHLMSPAIEPGQVPKNILQELLGQPVQRPASNLLSGLMGSLEPTTSLLGQ  
 RAPSPPLSQVFQTRAASADYLRPRIPSPIGFTPGPQQLGDPFQGMKPKMSPITAMQSQLELQQAALGL  
 ALPHDLAVQAANFYQPGFGKQVDRTDRGFRNRQQRVTKSPAPVHRGNSSPAPAASITSMSPSFTPTS  
 VIRKMYESKEKSKEEPASGKAALGDSKEDTQKASEENLLSSSSVPSADRDSSPTTNSKLSALQRSSCSTP  
 LSQANRYTKEQDYRPKATGRKPTLASPVPTTFLRPVHVQVPLPHVPMVRAHRLHPGLVQRMLAQGVH  
 PQHLPSLLQTGVLPPGMDLSHLQGISGPILGQPFYPLPAASHPLLNPRPGTPLHLAMVQQQLQRSVLHPP  
 GSGSHAAAVSVQTTQNVPSRSGPLPHMHSQLEHRPSQRSSSPVGLAKWFGSDVLQQLPSMPAKVISVDE  
 LEYRQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6236\\_g06.zip](https://cdn.origene.com/chromatograms/mk6236_g06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001164501

**ORF Size:** 2955 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\\_001164501.1](#), [NP\\_001157973.1](#)

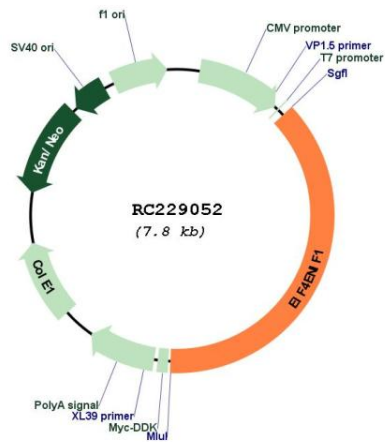
**RefSeq Size:** 3680 bp

**RefSeq ORF:** 2958 bp

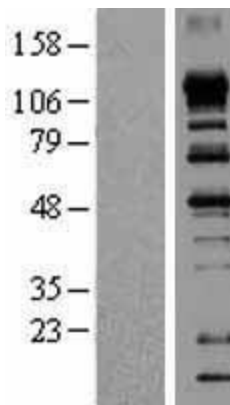
**Locus ID:** 56478  
**UniProt ID:** [Q9NRA8](#)  
**Cytogenetics:** 22q12.2  
**MW:** 108.2 kDa

**Gene Summary:** The protein encoded by this gene is a nucleocytoplasmic shuttle protein for the translation initiation factor eIF4E. This shuttle protein interacts with the importin alpha-beta complex to mediate nuclear import of eIF4E. It is predominantly cytoplasmic; its own nuclear import is regulated by a nuclear localization signal and nuclear export signals. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2009]

### Product images:



Circular map for RC229052



Western blot validation of overexpression lysate (Cat# [LY432079]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229052 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).