

Product datasheet for **MG226466**

Eif4a2 (NM_001123038) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eif4a2 (NM_001123038) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Eif4a2
Synonyms:	4833432N07Rik; BM-010; Ddx2b; eIF-4A-II; Eif4; eIF4A-II
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226466 representing NM_001123038 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGGTGGCTCCGCGGATTACAACAGAGAACATGGCGGCCAGAGGGAATGGACCCCGATGGTGTCA
TCGAGAGCAACTGGAATGAAATTGTTGATAACTTTGATGATATGAATTTAAAGGAGTCCCTTCTTCGAGG
CATCTATGCATATGGTTTTGAGAAGCCTTCAGCTATTCAGCAAAGAGCTATTATCCCTTGATTTAAAGGG
TATGATGTGATTGCTCAAGCTCAGTCAGTACTGGCAAGACAGCCACATTTGCTATTTCCATCCTGCAAC
AGTTGGAGATTGAGTTCAAGGAGACCAAGCACTAGTATTGGCCCCACCAGAGAAGTGGCTCAACAGAT
CCAAAAGGTAATTTGGCTCTTGAGATTATATGGGAGCAACTTGTGCATGCTTGCATTGGAGGAACAAAT
GTTCGAAATGAAATGCAGAAGTTCAGGCTGAAGCCCCTCACATTGTTGTTGGTACTCCAGGAGAGTGT
TTGATATGCTAAACAGAAGATACCTTTCTCCAAAATGGATCAAAAATGTTGTTTTGGACGAAGCAGATGA
AATGTTGAGCCGAGGTTTAAGGATCAGATCTATGAGATTTTCCAGAAATTAATACAAGCATTCAAGTT
GTGTTGCTTTCTGCCACAATGCCAAGTGTGCTAGAAGTGACCAAGAAATTCATGAGAGATCCAATTC
GAATTCGGTGAAGAAGGAAGATTGACCCTTGAAGGAATTAACAATTTTATTAATGTTGAGCGAGA
GGAGTGAAGCTGGACACTCTTTGTGACTTGTATGAGACTTTGACTATCACACAAGCAGTTATTTTTCTC
AATACAAGCGCAAGGTGGACTGGCTCACGGAGAAAATGCATGCCAGGGACTTCACAGTTTCTGCTCTGC
ATGGTGACATGGACCAGAAGGAAAGAGATGTCATCATGAGGAAATTCAGATCAGGGTCAAGCCGTGTTCT
GATCACTACTGACTTGTGGCCCGTGGGATTGACGTGCAACAAGTGCCTTGGTTATAAACTACGATCTA
CCTACCAATCGTGAATACTATATTCACAGGAGTCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG226466 representing NM_001123038
 Red=Cloning site Green=Tags(s)

MSGGSADYNREHGGPEGMDPDGVIESNWNEIVDNFDDMNLKESLLRGIYAYGF EKPSAIQQRRAIIPCIKG
 YDVIAQAQSGTGKTATFAISILQQLIEFKETQALVLAPTRELAQQIQKVILALGDYMGATCHACIGGTN
 VRNEMQKLQAEAPHIVVGTGPRVFDMLNRRYLSPKWIKMFLVDEADEMLSRGFKDQIYEIFQKLNTSIQV
 VLLSATMPTDVLVETKKFMRDPIRILVKKEELTLEGIKQFYINVEREEWKLDLTLCDLYETLTITQAVIFL
 NTRRKVDWLTEKMHARDFTVSALHGDMDQKERDVMREFRSGSSRYLITDILLARGIDVQVSLVINYDL
 PTNRENYIHRSR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001123038

ORF Size: 1086 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_001123038.2](#), [NP_001116510.1](#)

RefSeq Size: 3174 bp

RefSeq ORF: 1089 bp

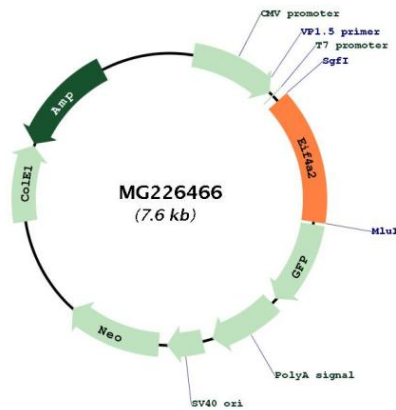
Locus ID: 13682

UniProt ID: [P10630](#)

Cytogenetics: 16 13.93 cM

Gene Summary: ATP-dependent RNA helicase which is a subunit of the eIF4F complex involved in cap recognition and is required for mRNA binding to ribosome. In the current model of translation initiation, eIF4A unwinds RNA secondary structures in the 5'-UTR of mRNAs which is necessary to allow efficient binding of the small ribosomal subunit, and subsequent scanning for the initiator codon.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226466