

Product datasheet for **MR226463**

Eif4a2 (NM_001123037) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eif4a2 (NM_001123037) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eif4a2
Synonyms:	4833432N07Rik; BM-010; Ddx2b; eIF-4A-II; Eif4; eIF4A-II
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226463 representing NM_001123037 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCATATGGTTTTGAGAAGCCTTCAGCTATTCAGCAAAGAGCTATTATCCCTTGATTAAAGATCCAAA
AGGTAATTTTGGCTCTTGGAGATTATATGGGAGCAACTTGTCATGCTTGCATTGGAGGAACAAATGTTTCG
AAATGAAATGCAGAAGTTGCAGGCTGAAGCCCCTCACATTGTTGGTACTCCAGGGAGAGTGTGGAT
ATGCTAAACAGAAGATACCTTTCTCCAAAATGGATCAAAATGTTGTTTTGGACGAAGCAGATGAAATGT
TGAGCCGAGGGTTAAGGATCAGATCTATGAGATTTCCAGAAATTAATACAAGCATTAGGTTGTGTT
GCTTTCTGCCACAATGCCAACTGATGTGCTAGAAGTGACCAAGAAATTCATGAGAGATCCAATTCGAATT
CTGGTGAAGAAGGAAGAATTGACCCTTGAAGGAATTAACAATTTTATATTAATGTTGAGCGAGAGGAGT
GGAAGCTGGACACTCTTTGTGACTTGTATGAGACTTTGACTATCACACAAGCAGTTATTTTTCTCAATAC
AAGGCGCAAGGTGGACTGGCTCACGGAGAAAATGCATGCCAGGGACTTCACAGTTTCTGCTGTCATGGT
GACATGGACCAGAAGGAAAGAGATGTCATCATGAGGGAATTCGATCAGGGTCAAGCCGTGTTCTGATCA
CTACTGACTTGTGGCCCGTGGGATTGACGTGCAACAAGTGTCTTGGTTATAAACTACGATCTACCTAC
CAATCGTGAAGAACTATATTCACAGAATTGGCAGAGGGGGTTCGATTTGGGAGGAAAGGTGTGGCTATAAC
TTTGTACTGAAGAAGACAAGAGGATTCCTGTCGACATTGAGACTTTCTACAATACTACAGTGGAGGAAA
TGCCCATGAATGTGGCTGACCTAATT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR226463 representing NM_001123037
Red=Cloning site Green=Tags(s)

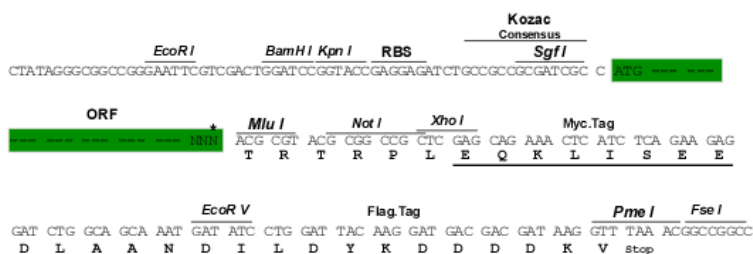
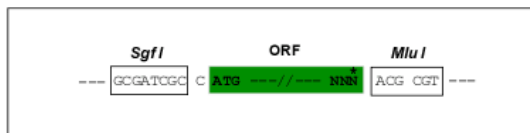
MHMLVRLSLQLFSKELLSVLVKIQKIVILALGDYMGATCHACIGGTNVRNEMQKLQAEAPHIVVGTGPGRVFD
 MLNRRYLSPKWIKMFVLDEADEMLSRGFKDQIYEIEFQKLNLSIQVLLSATMPTDVLVETKKFMRDP
 IRLVKKEELTLEGIKQFYINVEREEWKLDTLCDLYETLTITQAVIFLNTRRKVDWLTEKMHARDFTVSALHG
 DMDQKERDVIMREFRSGSSRVLITDLDLARGIDVQQVSLVINYLPTNRENYIHRIGRGGFRGKGVAIN
 FVTEEDKRILRDIETFYNTTVEEMPNNVADLI

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_001123037

ORF Size: 936 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_001123037.2](#), [NP_001116509.1](#)

RefSeq Size: 2218 bp

RefSeq ORF: 939 bp

Locus ID: 13682

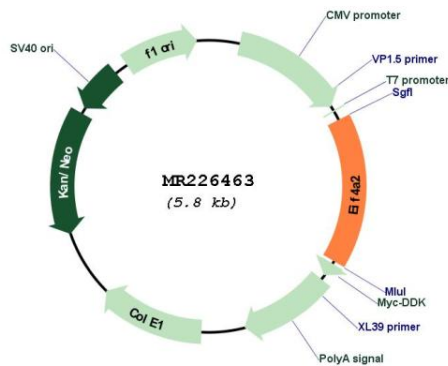
UniProt ID: [P10630](#)

Cytogenetics: 16 13.93 cM

MW: 36.6 kDa

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 MR226463