

## Product datasheet for MR204498

### Eif2s1 (NM\_026114) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eif2s1 (NM_026114) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eif2s1
Synonyms:	35kDa; 0910001O23Rik; 2410026C18Rik; Eif2a; eIF2alpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204498 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGGGCTAAGTTGTAGATTTTATCAACACAAATTCCTGAGGTGGAAGATGTAGTGATGGTGAATG  
TAAGATCCATTGCTGAAATGGGGCCTATGTCAGCTTGTGGAATATAATAACATTGAAGGCATGATTCT  
TCTTAGTGAATTATCCAGACGACGTATCCGTTCTATAAACAACTGATCCGAATTGGCAGAAATGAATGT  
GTTGTTGTCATTAGAGTGGATAAAGAAAAAGGATATATAGATTTGTCAAAAAGAAGATTTCTCCAGAGG  
AAGCAATCAAATGTGAGGACAAATTCACAAAATCCAAAAGTGTATAGCATTCTCGCCATGTTGCTGA  
GGTATTAGAATATACCAAGGATGAGCAGCTGGAGAGCCTGTTCCAGAGGACTGCCTGGGTCTTCGATGAC  
AAGTACAAGACCTGGATACGGTGCCTACGATGCTTTAAGCATGCAGTCTCAGACCCATCTATCTTGG  
ATAGTTTGAATTTGAATGAAGATGAAAGAGAAGTACTCATTAAATAATCAATAGGCGTTTGACCCACA  
AGCGGTCAAAATTCGAGCAGATATTGAAGTAGCTTGTATGGTTATGAAGGCATTGATGCTGTAAGAA  
GCCCTGAGGGCAGGTTTGAATGTTCTACAGAAACCATGCCATCAAGATTAATCTAATAGCTCCACCCA  
GGTATGTGATGACAACAACGACCCTGGAGAGGACAGAAGGCTGTCTGTCTCAATCAGGCTATGGCAGT  
TATCAAAGAGAAGATCGAGGAGAAGAGGGCGTCTTCAATGTTTCAGATGGAGCCAAAGTGGTCACAGAT  
ACAGATGAGACTGAACTTGAAGGCAGCTGGAACGGCTGGAGAGAGAAAATGCAGAAGTGGATGGAGATG  
ATGATGCAGAAGAAATGGAAGCCAAAGCTGAAGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR204498 protein sequence  
Red=Cloning site Green=Tags(s)

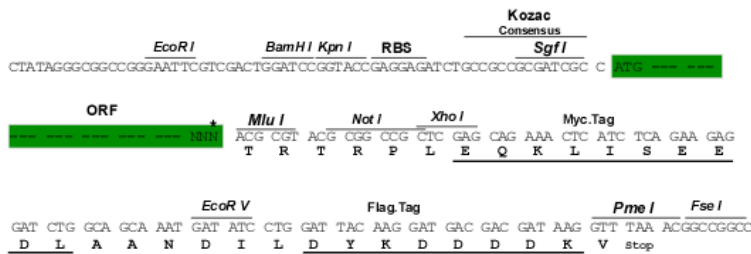
MPGLSCRIFYQHKFPEVEDVVMNVRSIAEMGAYVSLLEYNNIEGMILLSELSRRRIRSINKLIRIGRNEC  
 VVVIRVDKEKGYIDLKRRVSPPEAIKCEDKFTKSKTVYSILRHVAEVLEYTKDEQLESFQRTAWVFDD  
 KYKRPGYGAYDAFKHAVSDPSILDSLNLNEDEREVLINNINRRLTPQAVKIRADIEVACYGYEGIDAVKE  
 ALRAGLNCSTETMPIKINLIAPPRVMTTTTLERTEGLSVLNQAMAVIKEKIEEKRGVFNVMPEPKVVTD  
 TDETELARQLERLERENAEVDGDDDAEEMEAKAED

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\_026114

**ORF Size:** 948 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\\_026114.3](#)

**RefSeq Size:** 3152 bp

**RefSeq ORF:** 948 bp

**Locus ID:** 13665

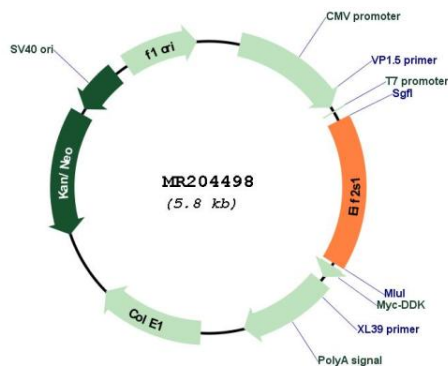
**UniProt ID:** [Q6ZWX6](#)

**Cytogenetics:** 12 C3

**MW:** 36.1 kDa

**Gene Summary:** Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S pre-initiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF-2 and release of an eIF-2-GDP binary complex. In order for eIF-2 to recycle and catalyze another round of initiation, the GDP bound to eIF-2 must exchange with GTP by way of a reaction catalyzed by eIF-2B (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR204498