

## Product datasheet for **MR209105**

### Eif2a (NM\_001005509) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eif2a (NM_001005509) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eif2a
Synonyms:	D030048D22; D3Ertd194e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR209105 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCGCCGTCCACACCGCTGTTGACAGTCAGAGGATCAGAGGGACTGTACATGGTGAATGGACCACCAC  
 ACTTCACAGAAAAGCACGGTGCTTCCAGAGAATCTGGAAGAAATTGCAAAGTGACACTTTTAGTAAGGA  
 TGGGACATTGTTTGCCTGGAGCAATGGAGAAAAAGTAAATATAATCAATGTCGCTAACAAGGGACTACTG  
 CACTCCTTCGACCTCCAAAAGCAGTTTGCCTTGAATTCTACCAATAACACTGTCCTGGCAACGTGGC  
 AGCCTTACACTACTTCTAAAGATGGCACTGCTGGGACGCCTAACCTACAACCTTTATGACATGAAAAGTGG  
 AGCATGTTTGAATCGTTCATCCAGAAAAAATGCAAAATTGGTGTCTTCTCTGGTCAGATGAAATT  
 ATTTGTGCCCGGAATGTTAACAACGAAGTTCACCTCTTTGAGAACAACAATTTAACACAATTGCAATA  
 AATTACATTTGCAAAAAGTTAATGACTTAAATTTATCACCTGGAACCCAACCTTATAAGGTGGCAGTTTA  
 TGTCCAGGAAGTAAAGGTGCCCTCATTGTTGACTGTATCAGTATCCCACTTTGCCGGACCTCAG  
 GCAGCACTGGCCAATAAAAGCTTCTTTAAAGCTGATAAGGTTACAATGCTGTGGAATAAAAAAGCTACTG  
 CTGTGCTGGTAATAGCCAGTACAGAGTTGACAAGACAGGAGCCTCTACTATGGAGAACAACACTGCA  
 CTACATTGCAACAAATGGAGAAAGTGTGTGGTACAATTACCAAAAAATGGCCCAATTTATGATGTAGTT  
 TGGAAATCCAGTTCTACTGAGTTTTGCGCTGTTTATGGTTTTATGCCTGCGAAAGCAACAGTTTTCAACC  
 TGAAGTGTGATCCTGTGTTTACTTTGGGACTGGTCTCGCAACGCAGCCTTCTATAGCCCTCATGGACA  
 TATATTAGTGTGGCTGGATTGGAAATCTTCGAGGACAAATGGAAGTATGGGATGTTAAAACTACAAG  
 CTTATTTCTAAGCCAGTGGCTTCTGATTCTACATATTTGCGCTGGTGGCCAGATGGTGGATATCTTTT  
 CAGCCACATGTCTCCTAGGTTACGTGTTAATAATGGGATAAGATCTGGCATTATACTGGCTCTCTTTT  
 GCATAAGTATGATGTGCCATCAAATGGAGAATTATGGCAGGTTTCTTGGCAGCCATTTTGGATGGAATA  
 TTTCCAGCAAAAACGATAAAGTACCAAGCAGTTCCAAGTGAAGTGCCTAGTGAGGAGCCTAAAGTTGCAA  
 CAGCTTATAGACCTCCAGCCTTAAGAAATAAGCCAGTCACCAATTCAAAAGTGCATGAAGAGGAACCTCC  
 CCAGAATATGAAGCCACATCCAGGAAGTACAAGCCATTATCAAAAACAGCCCTTAAAAATCAAAGGAAG  
 CATGAAGTAAAAAGCTGCAAAAACAGGAAGCAAGAAAGTATGCGGCTCTACTCCTGTCCACAGAGTG  
 CACCACGGAACACGGTCACCCAGTCTGCTTCTGGTATCCTGAAGTAGACAAAAAATTAAGAATCTAAA  
 GAAGAAACTGAAAGCCATAGAGCAGCTAAAAGAGCAGGCAGCCGCGGGAACAGCTAGAAAAAATCAG  
 TTGGAGAAAATTCAGAAAGAGACAGCCCTTCTCCAAGAGCTTGAAGATTTGGAATTTGGGAGTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR209105 protein sequence  
 Red=Cloning site Green=Tags(s)

MAPSTPLLTVRGSEGLYMVNGPPHFTESTVLPRESGRNCKVYTFSKDGLTFAWSNGEKVNIINVANKGLL  
 HSFDLPKAVCLEFSPNNTVLATWQPYTTSKDGTAGTPNLQLYDMKTGACLSFIQKMKQNWCPSSWSDDEI  
 ICARNVNNEVHFENNNTIANKLHLQKVNDFNLSPGTQPYKVAVYVPGSKGAPSFVRLYQYPNFAFPQ  
 AALANKSFFKADKVTMLWNKKATAVLVIASTEVDKGTGASYGQTLHYIATNGESAVVQLPKNGPIYDVV  
 WNSSSTEFCAVYGFMPAKATVFNLCDDPVDFGTGPRNAAFYSPHGILVLAGFNLRGQMEVWDVKNYK  
 LISKPVASDSTYFAWCPDGEHILATCAPRLRVNNGYKIWHYTGSLHLKYDVPSNGELWQVSWQPFLDGI  
 FPAKTIKYQAVPSEVPSEPKVATAYRPPALRNKPVNTNSKLHEEEPPQNMKPHPGSDKPLSKTALKNQRK  
 HEAKKAQKQEARSDAAPTVPVQSAPRNTVTSASGDPEVDKIKNLKKLKAIEQLKEQAAAGKQLEKNQ  
 LEKIQKETALLQLEDLELGV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001005509

**ORF Size:** 1746 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\\_001005509.2](#)

**RefSeq Size:** 2322 bp

**RefSeq ORF:** 1746 bp

**Locus ID:** 229317

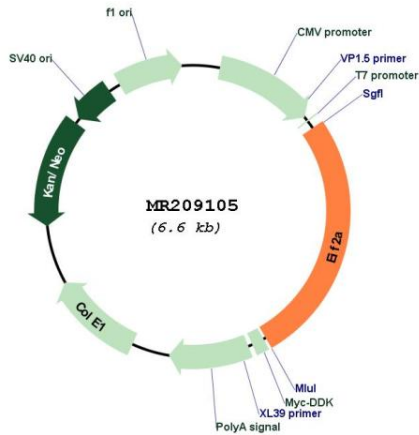
**UniProt ID:** [Q8BJW6](#)

**Cytogenetics:** 3 28.58 cM

**MW:** 64.4 kDa

**Gene Summary:** Functions in the early steps of protein synthesis of a small number of specific mRNAs. Acts by directing the binding of methionyl-tRNAi to 40S ribosomal subunits. In contrast to the eIF-2 complex, it binds methionyl-tRNAi to 40S subunits in a codon-dependent manner, whereas the eIF-2 complex binds methionyl-tRNAi to 40S subunits in a GTP-dependent manner. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR209105