

Product datasheet for **MG209105**

Eif2a (NM_001005509) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eif2a (NM_001005509) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Eif2a
Synonyms:	D030048D22; D3Ertd194e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209105 representing NM_001005509
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCCGTCCACACCGCTGTTGACAGTCAGAGGATCAGAGGGACTGTACATGGTGAATGGACCACCAC
 ACTTCACAGAAAAGCACGGTGCTTCCCAGAGAATCTGGAAGAAATTGCAAAGTGTACACTTTTAGTAAGGA
 TGGGACATTGTTTGCCTGGAGCAATGGAGAAAAAGTAAATATAATCAATGTCGCTAACAAGGGACTACTG
 CACTCCTTCGACCTCCAAAAGCAGTTTGCCTTGAATTCTACCAATAACACTGTCTGGCAACGTGGC
 AGCCTTACACTACTTCTAAAGATGGCACTGCTGGGACGCCTAACCTACAACCTTTATGACATGAAAAGTGG
 AGCATGTTTGAATCGTTCATCCAGAAAAAATGCAAAATTGGTGTCTTCTCTGGTCAGATGATAAATT
 ATTTGTGCCCGGAATGTTAACAACGAAGTTCACCTCTTTGAGAACAACAATTTAACACAATTGCAATA
 AATTACATTTGCAAAAAGTTAATGACTTAAATTTATCACCTGGAACCCAACTTATAAGGTGGCAGTTTA
 TGTCCCAGGAAGTAAAGGTGCCCTCATTGTTGCGACTGTATCAGTATCCCACTTTGCCGGACCTCAG
 GCAGCACTGGCCAATAAAAGCTTCTTTAAAGCTGATAAGGTTACAATGCTGTGGAATAAAAAAGCTACTG
 CTGTGCTGGTAATAGCCAGTACAGAGTTGACAAGACAGGAGCCTCTACTATGGAGAACAACACTGCA
 CTACATTGCAACAAATGGAGAAAGTGTGTGGTACAATTACCAAAAAATGGCCCAATTTATGATGTAGTT
 TGGAAATCCAGTCTACTGAGTTTTGCGCTGTTTATGGTTTTATGCCTGCGAAAGCAACAGTTTTCAACC
 TGAAGTGTGATCCTGTGTTTACTTTGGGACTGGTCTCGCAACGCAGCCTTCTATAGCCCTCATGGACA
 TATATTAGTGTGGCTGGATTGGAAATCTTCGAGGACAAATGGAAGTATGGGATGTTAAAACTACAAG
 CTTATTTCTAAGCCAGTGGCTTCTGATTCTACATATTTGCGCTGGTGGCCAGATGGTGGATATCTTAA
 CAGCCACATGTCTCTAGGTTACGTGTTAATAATGGGATAAGATCTGGCATTATACTGGCTCTCTTTT
 GCATAAGTATGATGTGCCATCAAATGGAGAATTATGGCAGGTTTCTTGGCAGCCATTTTTGGATGGAATA
 TTTCCAGCAAAAACGATAAAGTACCAAGCAGTTCCAAGTGAAGTGCCTAGTGAGGAGCCTAAAGTTGCAA
 CAGCTTATAGACCTCCAGCCTTAAGAAATAAGCCAGTCACCAATTCAAAAGTGCATGAAGAGGAACCTCC
 CCAGAATATGAAGCCACATCCAGGAAGTACAAGCCATTATCAAAAACAGCCCTTAAAAATCAAAGGAAG
 CATGAAGTAAAAAGCTGCAAAAACAGGAAGCAAGAAAGTATGCGGCTCTACTCCTGTCCACAGAGTG
 CACCACGGAACACGGTCACCCAGTCTGCTTCTGGTATCCTGAAGTAGACAAAAAATTAAGAATCTAAA
 GAAGAAACTGAAAGCCATAGAGCAGCTAAAAGAGCAGGCAGCCGCGGGAACAGCTAGAAAAAATCAG
 TTGGAGAAAAATCAGAAAGAGACAGCCCTCTCCAAGAGCTTGAAGATTTGGAATTTGGGAGTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG209105 representing NM_001005509
 Red=Cloning site Green=Tags(s)

MAPSTPLLTVRGSEGLYMVNGPPHFTESTVLPRESGRNCKVYTFSKDGLTFAWSNGEKVNIINVANKGLL
 HSFDLPKAVCLEFSPNNTVLATWQPYTTSKDGTAGTPNLQLYDMKTGACLKSF IQKMQNWCPSWSDDEI
 ICARNVNEVHFENNNFNNTIANKLHLQKVNDFNLSPGTQPYKVAVYVPGSKGAPSFVRLYQYPNFAGPQ
 AALANKSFFKADKVTMLWNKATAVLVIASTEVDKTGASYGQTLHYIATNGESAVVQLPKNGPIYDVV
 WNSSSTEFCAVYGFMPAKATVFNLKCDPVDFGTGPRNAAFYSPHGHLVLAGFGNLRGQMEVWDVKNYK
 LISKPVASDSTYFAWCPDGEHILTATCAPRLRVNNGYKIWHYTGSL LHKYDVPSNGELWQVSWQPFLDGI
 FPAKTIKYQAVPSEVPSEEPKVATAYRPPALRNKPVVNSKLHEEEPPQNMKPHPGSDKPLSKTALKNQRK
 HEAKKAAKQEARSDAAPTVPVQSAPRNTVTQSASGDPEVDKIKIKLKKLKAIEQLKEQAAAGKQLEKNQ
 LEKIQKETALLQLEDLELGV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001005509

ORF Size: 1743 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

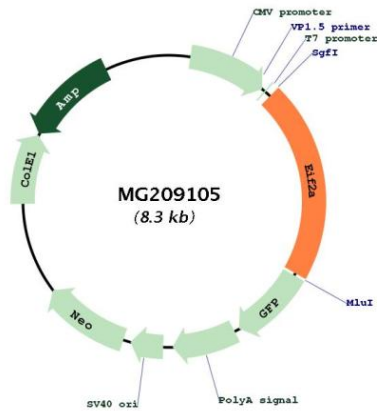
UniProt ID: [Q8BJW6](#)

Cytogenetics: 3 28.58 cM

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 MG209105