

Product datasheet for **MG210301**

Eef2k (NM_007908) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eef2k (NM_007908) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Eef2k
Synonyms:	C86191; eEF-2K
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG210301 representing NM_007908
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGACGAAGACCTCATCTTCTGCCTGGAAGTGTGACGGTGGCAGGTGCTCCCGAGCTGGCCACA
 ATGCGGACTCTGACACAGACAGTGACGATGATGAGGGCTATTTTCATCTGCCCCATCACTGATGACCACAT
 GTCCAATCAGAATGTCAGCTCCAAGTCCAGAGCTACTATAGCAACCTAACAAAAACAGAGTGCGGCTCC
 ACAGGGTCACCAGCCAGCTCCTTCCACTCAAGGAAGCCTGGAAGCATGCGATCGAGAAAGCCAAGCACA
 TGCCTGACCCCTGGGCTGAATTCATCTCGAGGACATCGCCACAGAACATGCTACTCGGCACAGGTACAA
 CGCTGTACCCGGGAATGGCTGAAAGACGAGGTTCTGATCAAGATGGCGTCTCAGCCCTTCGGCCGTGGA
 GCAATGAGGGAGTGCTTCAGGACGAAGAACTCTCCAATTCTTGACGCCAGCAATGGAAGGGGGCCT
 CCAACTACGTGGCAAGCGCTACATCGAGCCGGTGGACAGGAGCGTGTACTTTGAGGATGTGACGCTCCA
 GATGGAGGCGAAGCTCTGGGGGAGGATTACAATCGGCACAAGCCCCCAAGCAGGTGGATATCATGCAG
 ATGTGCATCATTGAGCTAAAGGACAGACCAGGCCAGCCCTCTTCCACTTGGAGCACTACATTGAGGGCA
 AGTACATCAAGTACAATCCAACCTCAGGCTTTGTCCGTGATGACAACATCCGACTAACCCACAGGCCTT
 CAGCCATTTACATTTGAGCGTTCTGGTCATCAGCTGATTGTAGTGGACATCCAGGGTGTGGGTGACCTT
 TATACCGACCCACAGATCCACACTGAGAAAGGCACTGACTTTGGAGATGGTAACCTTGGTGTCCGGGGAA
 TGGCTCTCTTCTACTCTCATGCCTGCAACCGGATTTGTGAGAGCATGGGCTTACGCCCTTTGACCT
 CTCCCCACGGGAACAGGATGCGGTGAATCAGAGCACCAGGCTATTGCAATCAGCCAAGACCATCTTGAGG
 GGGACAGAGGAGAAGTGTGGGAGTCCCCGCATAAGGACACTCTAGCAGCCGGCCCCCTTTGCTCCTTC
 CCTGTCTAGAGAACTCCGGGGATGAGAACATGAGTGACGTGACCTTTGACTCTCTGCCTTCTCCCCGCT
 TTCAGCTACACCACACAGCCAGAACTGGACCCTCCATTGGCCAGTGTGGTGGTACCTCGATAACATG
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 GCGAGAAGCGAAGTGACCTGGATGATCCTGAGCCCCGAGAACACGGCCACTCCAACGGCAACCGAAGGCA
 TGAATCTGACGAGGATAGCCTGGGCAGCTCTGGACGGTCTGTGTGGAGACGTGGAACCTGCTCAATCCC
 TCCCGCTGCACCTGCCGAGGCCCTCGGCCGTGGCCCTAGAAGTGCAGAGGCTAAATGCCCTGGACCTTG
 GAAGGAAAATCGGGAAGTCTGTTTTGGGAAGGTCATCTGGCCATGGTGCATACCACGAGGGCGGGCG
 CTTCTGCGAGAAGGATGAGGAGTGGGATCGAGAGTCAGCCATCTCCATCTGGAGCATGCAGCTGACCTG
 GGAGAACTGGAGGCCATCGTGGGCTAGGCCTCATGTACTCTCAGCTGCCCCACCACATCCTGGCTGATG
 TCTCTCTGAAGGAGACAGAGGAGAACAAGACAAAAGGCTTTGATTACTTACTGAAGGCGGCAGAAGCTGG
 TGACAGGCATTCCATGATTTTAGTGGCCGAGCTTTTGACACTGGCCTGAACCTCAGCCCAGACAGGTGT
 CAAGACTGGTCGGAAGCCTTGCCTGGTACAACACAGCCCTGGAGACAACAGACTGCGATGAAGGCGGGG
 AGTACGATGGGATACAGGACGAGCCCCAGTACGCACTGCTGGCCAGGGAGGCGGAGATGCTGCTACCCGG
 GGGATTTGGACTGGACAAGAACCCCAAGATCAGGAGATTTGTACCCAGGCAGCTGAGGCAGCAATG
 GAAGCCATGAAGGGCCGGCTAGCCAACCACTACTACGAGAAGGCGGAAGAGGCCTGGGCCAGATGGAGG
 AA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210301 representing NM_007908
 Red=Cloning site Green=Tags(s)

MADEDLIFCLEGVDGGRCSRAGHNADSDTSDDDDEGYFICPITDDHMSNQNVSSKVQSYSNLTKTECGS
 TGSPASSFHFKEAWKHAIEKAKHMPDPWAEFHLEDIATEHATRHRYNVAVTGEWLKDEVLIKMASQPFGRG
 AMRECFRTKKLSNFLHAQQWKGASNYVAKRYIEPVDRSVYFEDVQLQMEAKLWGEDYNRHKPPKQVDIMQ
 MCIIELKDRPGQPLFHLLEHYIEGKYIKYNSNSGFVRDDNIRLTPQAFSHFTFERSGHQLIVVDIQVGD
 YTDPIHTEKGTDFGDGDLGVRGMALFFYSHACNRICQSMGLTPFDLSPREQDAVNQSTRLLQSAKTILR
 GTEEKCGSPRIRTLSSSRPPLLLRLSENSGDENMSDVTDFDLSPPSSATPHSQKLDHLHWPVFGDLNMM
 GPRDHDRMDNHRDSENSGDSGYPSEKSDLDPEPREHGHSGNRRHESDEDSLSSGRVCVETWNLNPNP
 SRLHLPRPSAVALVQRLNALDLGRKIGKSVLGVHLAMVRYHEGGRFCEKDEEWDRESAIFHLEHAADL
 GELEAIVGLGLMYSQLPHHILADVSLKETEENKTKGFDYLLKAAEAGDRHSMILVARAFDTGLNLS
 PDRCQDWSEALHWYNTALETTDCDEGGEYDGIQDEPQYALLAREAEMLLTGGFGLDKNPQRSGDL
 YTAQAAEAM EAMKGRLANQYYEKAEEAWAQMEE

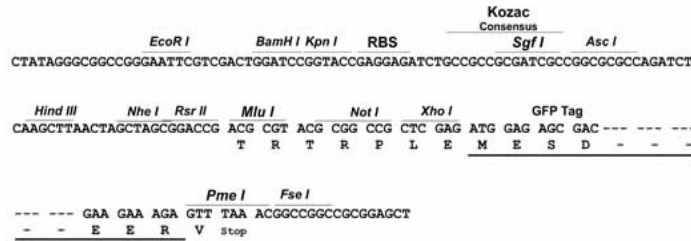
TRTRPLE - GFP Tag - V

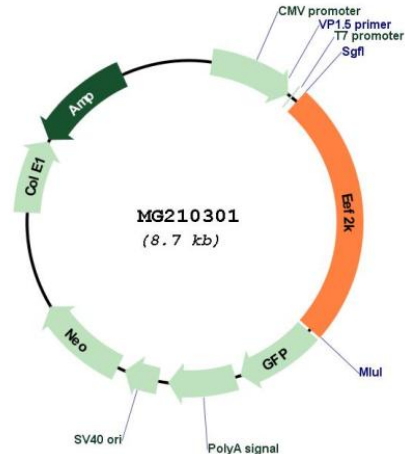
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_007908

ORF Size: 2172 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_007908.2](#)

RefSeq Size: 3079 bp

RefSeq ORF: 2175 bp

Locus ID: 13631

UniProt ID: [O08796](#)

Cytogenetics: 7 F2

Gene Summary: Threonine kinase that regulates protein synthesis by controlling the rate of peptide chain elongation. Upon activation by a variety of upstream kinases including AMPK or TRPM7, phosphorylates the elongation factor EEF2 at a single site, renders it unable to bind ribosomes and thus inactive. In turn, the rate of protein synthesis is reduced.
[UniProtKB/Swiss-Prot Function]