

Product datasheet for **MR210301**

Eef2k (NM_007908) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eef2k (NM_007908) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eef2k
Synonyms:	C86191; eEF-2K
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR210301 representing NM_007908
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGACGAAGACCTCATCTTCTGCCTGGAAGGTGTTGACGGTGGCAGGTGCTCCCGAGCTGGCCACA
 ATGCGGACTCTGACACAGACAGTGACGATGATGAGGGCTATTTTCATCTGCCCCATCACTGATGACCACAT
 GTCCAATCAGAATGTCAGCTCCAAGTCCAGAGCTACTATAGCAACCTAACAAAAACAGAGTGCGGCTCC
 ACAGGGTCACCAGCCAGCTCCTTCCACTTCAAGGAAGCCTGGAAGCATGCGATCGAGAAAGCCAAGCACA
 TGCCTGACCCCTGGGCTGAATTCATCTCGAGGACATCGCCACAGAACATGCTACTCGGCACAGGTACAA
 CGCTGTACCCGGGAATGGCTGAAAGACGAGGTTCTGATCAAGATGGCGTCTCAGCCCTTCGGCCGTGGA
 GCAATGAGGGAGTGCTTCAGGACGAAGAACTCTCCAATTCTTGACGCCAGCAATGGAAGGGGGCCT
 CCAACTACGTGGCAAGCGCTACATCGAGCCGGTGGACAGGAGCGTGTACTTTGAGGATGTGACGCTCCA
 GATGGAGGCGAAGCTCTGGGGGAGGATTACAATCGGCACAAGCCCCCAAGCAGGTGGATATCATGCAG
 ATGTGCATCATTGAGCTAAAGGACAGACCAGGCCAGCCCTCTTCCAATTGGAGCACTACATTGAGGGCA
 AGTACATCAAGTACAATCCAACCTCAGGCTTTGTCCGTGATGACAACATCCGACTAACCCACAGGCCTT
 CAGCCATTTACATTTGAGCGTTCTGGTCATCAGCTGATTGTAGTGGACATCCAGGGTGTGGGTGACCTT
 TATACCGACCCACAGATCCACACTGAGAAAGGCACTGACTTTGGAGATGGTAACCTTGGTGTCCGGGGAA
 TGGCTCTCTTCTACTCTCATGCCTGCAACCGGATTTGTGAGAGCATGGGCTTACGCCCTTTGACCT
 CTCCCCACGGGAACAGGATGCGGTGAATCAGAGCACCAGGCTATTGCAATCAGCCAAGACCATCTTGAGG
 GGGACAGAGGAGAAGTGTTGGGAGTCCCCGCATAAGGACACTCTAGCAGCCGGCCCCCTTTGCTCCTTC
 CCTGTCTCAGAGAACTCCGGGGATGAGAACATGAGTGACGTGACCTTTGACTCTCTGCCTTCTCCCGGTC
 TTCAGCTACACCACACAGCCAGAACTGGACCCTCCATTGGCCAGTGTGGTGGTACCTCGATAACATG
 GGCCCTAGAGACCATGACCGCATGGACAATCACCGGGACTCTGAGAATAGTGGGGACAGTGGGTATCCAA
 GCGAGAAGCGAAGTGACCTGGATGATCCTGAGCCCGAGAACACGGCCACTCCAACGGCAACCGAAGGCA
 TGAATCTGACGAGGATAGCCTGGCAGCTCTGGACGGTCTGTGTGGAGACGTGGAACCTGCTCAATCCC
 TCCCGCTGCACCTGCCGAGGCCCTCGGCCGTGGCCCTAGAAGTGCAGAGGCTAAATGCCCTGGACCTTG
 GAAGGAAAATCGGAAGTCTGTTTTGGGAAGGTCATCTGGCCATGGTGCATACCACGAGGGCGGGCG
 CTTCTGCGAGAAGGATGAGGAGTGGGATCGAGAGTCAGCCATCTCCATCTGGAGCATGCAGCTGACCTG
 GGAGAAGTGGAGGCCATCGTGGGCTAGGCCTCATGTACTCTCAGCTGCCCCACCACATCCTGGCTGATG
 TCTCTCTGAAGGAGACAGAGGAGAACAAGACAAAAGGCTTTGATTACTTACTGAAGGCGGCAGAAGCTGG
 TGACAGGCATTCCATGATTTTAGTGCCCGAGCTTTTGACACTGGCCTGAACCTCAGCCAGACAGGTGT
 CAAGACTGGTCGGAAGCCTTGCCTGGTACAACACAGCCCTGGAGACAACAGACTGCGATGAAGGCGGGG
 AGTACGATGGGATACAGGACGAGCCCCAGTACGCACTGCTGGCCAGGGAGGCGGAGATGCTGCTACCCG
 GGGATTTGGACTGGACAAGAACCCCAAGATCAGGAGATTTGTACCCAGGCAGCTGAGGCAGCAATG
 GAAGCCATGAAGGGCCGGCTAGCCAACCACTACTACGAGAAGGCGGAAGAGGCCTGGGCCAGATGGAGG
 AA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210301 representing NM_007908
 Red=Cloning site Green=Tags(s)

MADEDLIFCLEGVDDGGRCSRAGHNADSDTSDDDDEGYFICPITDDHMSNQNVSSKVVQSYSNLTKTECGS
 TGSPASSFHFKEAWKHAIEKAKHMPDPWAEFHLEDIATEHATRHRYNVAVTGEWLKDEVLIKMASQPFGRG
 AMRECFRTKKLSNFLHAQQWKGASNYVAKRYIEPVDRSVYFEDVQLQMEAKLWGEDYNRHKPPKQVDIMQ
 MCIIELKDRPGQPLFHLHYYIEGKYIKYNSNSGFVRDDNIRLTPQAFSHFTFERSGHQLIVVDIQVGD
 YTDPIHTEKGTDFGDGDLGVRGMALFFYSHACNRICQSMGLTPFDLSPREQDAVNQSTRLLQSAKTILR
 GTEEKCGSPRIRTLSSSRPPLLLRLSENSGDENMSDVTDFDLSPPSSATPHSQKLDHLHWPVFGDLNMP
 GPRDHRMDNHRDSENSGDSGYPSEKSDLDPEPREHGHSNGNRRHESDEDSLSSGRVCVETWNLNPNP
 SRLHLPRPSAVALVQRLNALDLGRKIGKSVLGVHLAMVRYHEGGRFCEKDEEWDRESAIFHLEHAADL
 GELEAIVGLGLMYSQLPHHILADVSLKETEENKTKGFDYLLKAAEAGDRHSMILVARAFDTGLNLS
 PDRCQDWSEALHWYNTALETTDCDEGGEYDGIQDEPQYALLAREAEMLLTGGFGLDKNPQRSGLYTA
 AAEEAM EAMKGRLANQYYEKAEEAWAQMEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

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

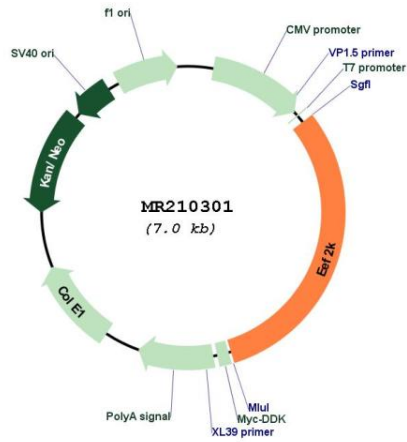
UniProt ID: [O08796](#)

Cytogenetics: 7 F2

MW: 82.2 kDa

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]

Product images:



Circular map for MR210301