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Product datasheet for RR207666

Eif3d (NM_001004283) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eif3d (NM_001004283) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Eif3d
Synonyms:	Eif3s7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RR207666 representing NM_001004283
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGAAGTTTATGACACCTGTGATCCAGGACAACCCCTCAGGCTGGGGTCCCTGTGCCGTTCCTGAGC
AGTTTCGGGATATGCCCTACCAGCCATTCAGCAAAGGAGATCGGCTGGGGAAGGTTGCAGACTGGACAGG
GGCCACGTACCAGGACAAGAGGTACACAAACAAGTATTCCTCTCAGTTCGGTGGGGGAAGTCAGTATGCA
TATTTCCACGAGGAGGATGAGACGAGCTTCCAGCTAGTGGACACAGCGCGTACACAGAAGACGGCCTACC
AGCGGAACCGGATGAGATTCGCACAGCGGAACCTCCGCAGAGACAAAGACCGGCGGAACATGGTGCAGTT
CAACCTACAGACACTGCCCAAAAGTGCCAAGCAGAAAGAGAGAGAACGAATTCGCTTACAGAAAAAATTC
CAGAAGCAATTTGGAGTGAGGCAAAAATGGGACCAGAAGTCACAGAAACCCCGAGACTCCTCGGTTGAAG
TTCGCAGTGACTGGGAGGTGAAGGAGGAGATGGACTTCCCTCAGCTGATGAAGATGCGCTACTTGGAGGT
GTCAGAGCCTCAAGACATCGAGTGCTGTGGAGCACTGGAGTACTATGACAAAGCCTTCGACCGCATCACC
ACGAGGAGTGAGAAGCCTCTGCGGAGCATCAAGCGCATCTTCCACACTGTCACCACCACAGACGACCCTG
TCATCCGGAAGCTGGCAAAAACGCAGGGCAATGTGTTTGCCACAGATGCCATCCTGGCCACACTGATGAG
CTGCACCCGCTCCGTGTACTCCTGGGACATTGTTGTCCAGAGGGTCGGATCTAAACTCTTCTTTGACAAG
AGGGACAATTCTGACTTTGACCTCCTGACTGTGAGTGAGACGGCTAACGAGCCCCCTCAAGATGAAGGCA
ATTCCTTCAACTCACCCCGGAACCTGGCCATGGAGGCCACCTACATCAACCACAACTTCTCCCAGCAGTG
CCTGAGAATGGGGAGAGAGAGATACAATTTCCCCAACCCAAACCCATTTGTGGAGGATGACATGGATAAG
AATGAGATCGCCTCCGTGGCTTACCGTTACCGGAGGTGGAAGCTTGGAGATGACATTGACCTTATTGTTC
GCTGTGAACATGATGGCGTCATGACTGGGGCCAACGGGGAAGTGTCCTTCATCAACATCAAGACACTCAA
TGAATGGGACTCCAGGCATTGTAATGGCGTTGACTGGCGTCAGAAGCTGGACTCTCAGCGTGGGGCTGTC
ATCGCCACTGAGTTGAAGAACAACAGCTACAAGTTGGCGCGATGGACGTGCTGTGCTTTGCTGGCTGGCT
CTGAGTACTTGAAGCTCGGGTATGTGTCCCGGTACCATGTAAAGGACTCCTCGCGCCACGTCATCCTGGG
CACCCAGCAGTTTAAGCCCAATGAGTTTGCCAGCCAAATCAACCTGAGTGTGGAGAATGCCTGGGGCATC
CTGCGCTGTGTCATTGATATCTGCATGAAGCTGGAGGAGGGCAAATACCTCATCCTCAAGGACCCCAACA
AGCAGGTCATCCGAGTCTACAGCTTGCCTGATGGCACCTTCAGCTCTGAGGAGGACGAAGAGGATGAGGA
GGAAGAGGAGGAAGAAGAAGAAGAGGAAGAAACT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

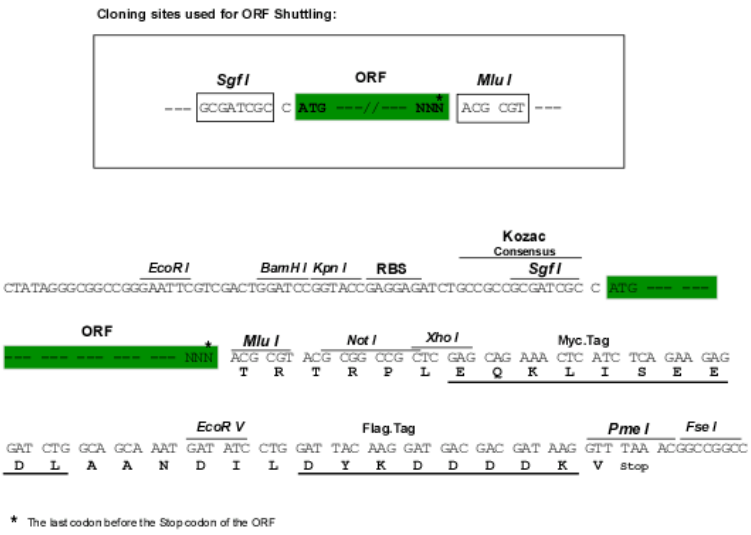
>RR207666 representing NM_001004283
Red=Cloning site Green=Tags(s)

MAKFMTPVIQDNPSGWGPCAVPEQFRDMPYQPFSKGDRLGKVADWTGATYQDKRYTNKYSSQFGGGSQYA
YFHEEDETSFQLVDTARTQKTAYQRNRMRFAQRNLRRDKDRRNMVQFNLQTLPKSAKQKERERIRLQKKF
QKQFGVRQKWDQKSQKPRDSSVEVRSDWEVKEEMDFPQLMKMRYLEVSEPQDIECCGALEYYDKAFDRIT
TRSEKPLRSIKRIFHTVTTTDDPVIRKLAKTQGNVFATDAILATLMSCTRSVYSWDIVVQRVGSKLFFDK
RDNSDFDLLTVSETANEPPQDEGNSFNSPRNLAMEATYINHNFSQQCLRMGRERYNFPNPNPFVEDDMDK
NEIASVAYRYRRWKLGDDIDLIVRCEHDGVMTGANGEVSFINIKTLNEWDSRHCNGVDWRQKLDSQRGAV
IATELKNNSYKLARWTCCALLAGSEYLKLGYVSRYHVKDSSRHVILGTQQFKPNEFASQINLSVENAWGI
LRCVIDICMKLEEGKYLILKDPNKQVIRVYSLPDGTFSSEEDEEDEEEEEEEEEEET

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001004283

ORF Size: 1644 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_001004283.1, NP_001004283.1

RefSeq Size: 1870 bp

RefSeq ORF: 1647 bp

Locus ID: 362952

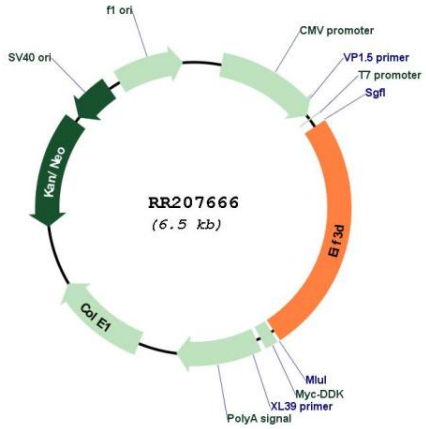
UniProt ID: Q6AYK8

Cytogenetics: 7q34

MW: 64 kDa

Gene Summary: mRNA cap-binding component of the eukaryotic translation initiation factor 3 (eIF-3) complex, a complex required for several steps in the initiation of protein synthesis of a specialized repertoire of mRNAs. The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 43S pre-initiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of post-termination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation. The eIF-3 complex specifically targets and initiates translation of a subset of mRNAs involved in cell proliferation, including cell cycling, differentiation and apoptosis, and uses different modes of RNA stem-loop binding to exert either translational activation or repression. In the eIF-3 complex, EIF3D specifically recognizes and binds the 7-methylguanosine cap of a subset of mRNAs.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR207666