

Product datasheet for **RN213558**

Eif2s3 (NM_001100542) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eif2s3 (NM_001100542) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Eif2s3
Synonyms:	Eif2g; Eif2s3x; PP42
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >RN213558 representing NM_001100542
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**C

ATGGCTGGGGGTGAGGCTGGAGTGAATCTCGGACAGCCACATCTTCCCGACAGGATCTCGCCACATTGG
 ATGTTACCAAGTTGACACCACTTTCCCATGAGGTTATCAGCAGACAAGCTACAATTAATATTGGTACAAT
 TGGTCATGTAGCTCATGGGAAGTCCACCGTGGTAAAGGCTATTTCTGGAGTTCACACTGTGAGATCAAAA
 AATGAGCTAGAAAAGAACATTACCATCAAGCTTGGATATGCTAATGCTAAGATTTATAAACTTGATGACC
 CAAGTTGTCTAGACCAGAATGTTATAGATCATGTGGAAGCAGTACACCAGATGAGTTTCTACAGACAT
 TCCAGGGACCAAGGGAACCTCAAATTAGTCAGGCATGTGCTTCTGTTGACTGTCCTGGCCATGATATT
 TTGATGGCTACGATGCTGAACGGTGCAGCGGTGATGGACGCAGCTCTTCTATTGATAGCTGGTAATGAAT
 CGTGTCTCAGCCCCAGACTTCAGAACACCTGGCTGCCATAGAAATCATGAACTCAAGCATATTTTGAT
 CTTACAGAATAAAATTGATCTGGTAAAAGAAAGTCAGGCTAAGGAACAATATGAGCAAACTCTCGCATTT
 GTGCAAGGAACCGTAGCAGAAGGGGCACCAATTATTCAAATTTCTGCTCAGCTGAAATACAATATTGAAG
 TTGTCTGTGAATACATAGTAAAGAAAATACCAAGTGCCTCCCAAGAGACTTTACTTCAGAGCCACGTCTTAT
 TGTTATCAGGTCAATTTGATGTCAACAAACCTGGCTGTGAAGTTGATGACCTTAAGGGAGGTGTAGCTGGC
 GGTAAGTATTCTAAAGGAGTGTTAAAGGTAGGCCAGGAGATAGAAGTCAGACCCGGTATTGTCTCCAAAG
 ACAGTGAAGGAAAACATGTGTAAACCATCTTTCCAAATTTGTGTCATTTTCGCTGAACATAATGA
 TCTTCAGTATGCTGCCCCGGTGGTCTCATTGGAGTTGGAACAAAGATCGACCCCACTTTGTGTCAGAGCT
 GACAGAATGGTGGGACAAGTGCTTGGTGCAGTTGGAGCTTTACCTGAAATATTCACAGAAGTGGAAATTT
 CCTATTTCTGCTCAGACGTCTTCTGGGCGTACGTAAGGAGACAAGAAAGCAGCAAGGTCCAAAA
 ACTGTCTAAGAATGAAGTGCTCATGGTCAACATAGGATCCTTGTCAACAGGAGGAAGAGTTAGTGCTGTC
 AAGGCTGATTTGGGCAAGATTGTTTTGACCAATCTGTGTGCACAGAAGTAGGAGAAAAAATTGCCTTAA
 GCAGAAGAGTTGAAAAACACTGGCGTTTAAATGGTTGGGTCAGATAAGAAGAGGAGTGACCATTAAGCC
 GACTGTAGATGATGACTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001100542

Insert Size: 1419 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001100542.1, NP_001094012.1

RefSeq Size: 3689 bp

RefSeq ORF: 1419 bp

Locus ID: 299027

UniProt ID: P81795

Cytogenetics: Xq22

Gene Summary: As a subunit of eukaryotic initiation factor 2 (eIF2), involved in the early steps of protein synthesis. In the presence of GTP, eIF2 forms a ternary complex with initiator tRNA Met-tRNA_i and then recruits the 40S ribosomal complex, a step that determines the rate of protein translation. This step is followed by mRNA binding to form the 43S pre-initiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF2 and release of an eIF2-GDP binary complex. In order for eIF2 to recycle and catalyze another round of initiation, the GDP bound to eIF2 must exchange with GTP by way of a reaction catalyzed by eIF2B (By similarity). Along with its paralog on chromosome X, may contribute to spermatogenesis up to the round spermatid stage (By similarity).[UniProtKB/Swiss-Prot Function]