

Product datasheet for **MC216487**

Eif2s3x (NM_012010) Mouse Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Eif2s3x (NM_012010) Mouse Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Eif2s3x |
| Synonyms: | AA409828; AA547477; AI314668; Eif-2gx |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |



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Fully Sequenced ORF: >MC216487 representing NM_012010
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGGGGGTGAGGGTGGAGTACTCTCGGTACGCCCCATCTTCCCACAGGATCTCGCCACATTGG
 ATGTTACCAAGTTGACACCACTTTCACATGAAGTTATCAGCAGACAAGCTACAATTAATATTGGTACAAT
 TGGTCACGTAGCTCATGGGAAGTCCACTGTGGTGAAGGCTATTTCTGGAGTTCACACTGTGAGATCAAAA
 AATGAACTCGAAAGGAACATTACCATCAAGCTTGGATATGCTAATGCTAAGATTTATAAACTTGATGACC
 CAAGTTGTCTAGACCAGAATGTTACAGATCGTGTGGAAGCAGCACACCAGATGAGTTTCTACAGACAT
 TCCGGGGACCAAAGGGAACCTCAAGTTAGTCAGGCATGTTTCTTTGTTGACTGTCCTGGCCATGATATT
 TTGATGGTACGATGCTGAACGGTGCAGCAGTATGGATGCGGCCCTTCTGTTGATAGCTGGTAACGAAT
 CATGCCCTCAGCCCAGACTTCCGAACACCTGGCTGCCATAGAAATCATGAAACTCAAGCATATTTGAT
 CTTACAGAATAAAATTGATCTGGTAAAAGAAAGTCAAGGTAAGGAACAATATGAGCAAATCTCGCATT
 GTGCAAGGAACCGTAGCAGAAGGGGCACCAATTATCCAATTTCTGCTCAACTGAAGTACAATATTGAAG
 TTGCTGTGAGTATATAGTGAAGAAAATACCAAGTGCACCAAGAGACTTTACTTCAGAGCCCCGTCTCAT
 TGTATCAGGTCATTTGATGTCAACAACTGGCTGTGAAGTTCGATGACCTTAAGGGAGGTGTAGCTGGT
 GGATAGTATCCTAAAAGGAGTGTAAAGGTAGGCCAGGAGATAGAAGTGAAGCCCGGATTTGCTCCAAAAG
 ACAGTGAAGGAAAACCTCATGTGTAACCAATCTTTTCCAAAATTTGTGCACTTTTTGCGGAACATAATGA
 TCTTCAATATGCTGCCCCGGTGGTCTCATTGGAGTTGGAACAAAGATCGACCCACCTTGTGCCGAGCT
 GACAGAATGGTGGGACAAGTGTCTGGTGCAGTTGGAGCTTTACCTGAAATATTACCCGAAGTGGAGATTT
 CCTATTTCTGCTTAGACGCTTCTGGTGTACGTACTGAAGGAGACAAGAAAGCAGCAAAGGTCCTAAAA
 GCTGTCTAAGAATGAAGTGTATGGTCAACATAGGCTCCCTGTCGACAGGAGGAAGATTAGTGCAGTC
 AAGGCTGATTTGGGCAAAATTGTTTTGACCAATCCCGTGTGCACAGAAAGTGAAGAAAAAATTGCCCTTA
 GCAGAAGAGTTGAGAAACACTGGCGTTTAAATGGTTGGGGTCAGATAAGAAGAGGAGTGACCATTAAGCC
 AACTGTAGATGATGACTGA

ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI

ACCN: NM_012010

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_012010.3](#), [NP_036140.1](#)

RefSeq Size: 3587 bp

RefSeq ORF: 1419 bp

Locus ID: 26905

UniProt ID: [Q9Z0N1](#)

Cytogenetics: X 41.52 cM

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-tRNAⁱ 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 Y, may contribute to spermatogenesis up to the round spermatid stage (PubMed:26823431).[UniProtKB/Swiss-Prot Function]