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## Product datasheet for MC204459

## Eif2s3y (NM_012011) Mouse Untagged Clone

## Product data:

## Product Type:

Product Name:
Expression Plasmids

## Tag:

Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

Fully Sequenced ORF:
Eif2s3y (NM_012011) Mouse Untagged Clone
Tag Free
Eif2s3y
Eif-2gy; Spy; Tfy
Neomycin

PCMV6-Kan/Neo (PCMV6KN)
Kanamycin ( $25 \mathrm{ug} / \mathrm{mL}$ )
>BC043656

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GCAAGATGGCGGGCGGAGAAGCCGGTGTCACTCTCGGGCAGCCGCATCTTTCTCGTCAGGATCTTGCCAC TTTGGATGTTACCAAGTTGACTCCGCTTTCACGTGAAATTATCAGCAGACAAGCCACAATTAATATAGGC ACAATTGGTCATGTTGCTCATGGAAAATCTACAGTTGTAAAAGCCATTTCTGGTGTTCACACTGTCCGAT TCAAAAATGAACTAGAAAGGAATATTACCATAAAACTTGGATATGCTAATGCCAAAATTTATAAGCTTGA TGACTCAAGTTGTCCTCGACCAGAATGTTACAGATCTTGTGGAAGTAGTACACCTGATGAGTTTCCTTCA GATATTCCAGGGACCAAAGGAAACTTCAGACTAGTCAGACATGTTTCCTTTGTTGATTGTCCTGGTCATG ATATTTTGATGGCAACTATGCTGAATGGGGCAGCAGTGATGGATGCAGCTCTTCTGTTGATAGCTGGTAA TGAATCTTGTCCTCAACCTCAGACTTCTGAACACCTGGCTGCCATTGAAATTATGAAGCTAAAACATATT TTGATTCTGCAAAATAAAATTGATTTGGTGAAAGAAAGCCAGGCTAAAGAACAGTATGAACAGATACTTG CATTTGTACAGGGTACAGTAGCCGAAGGAGCTCCTATTATTCCAATTTCTGCTCAGTTAAAATACAATAT TGAAGTTGTATGTGAGTATATAGTAAAGAAAATTCCAGTACCTCTAAGAGACTTTACTTCAGAACCCCGA CTTATTGTTATTCGGTCTTTTGATGTTAACAAACCTGGCTGTGAAGTTGATGACCTTAAAGGGGGTGTAG CTGGTGGTAGTATTTTAAAAGGCGTATTAAAGGTGGGACAAGAGATAGAAGTGAGACCTGGTATTGTTTC TAAAGACGGAGAAGGGAAGCTTATGTGTAAACCAATCTTTTCCAAGATTGTATCCCTTTTTGCAGAACAC AATGATCTTCAGTATGCTGCTCCAGGTGGTCTTATTGGAGTTGGAACAAAAATTGACCCAACGTTATGCC GAGCAGATAGAATGGTTGGGCAGGTCCTTGGTGCTGTTGGAGCATTACCTGAGATATTCACAGAGTTAGA AATTTCCTACTTCCTACTGAGACGGCTCCTAGGTGTACGTACAGAAGGAGACAAGAAAGCAGCAAAAGTT CAAAAGCTATCCAAGAATGAAGTACTCATGGTGAACATAGGGTCCTTGTCTACAGGAGGCAGAGTTAGTG CAGTCAAGGCAGATTTGGGTAAAATTGTTCTAACCAATCCAGTATGCACAGAAGTAGGAGAAAAAATTGC TCTAAGCCGACGAGTTGAGAAACACTGGCGTTTAATTGGTTGGGGCCAGATAAGAAGAGGCGTGACTATC AAGCCAACAATAGATGATGAATGAGATGATACATTTGGATGAAACCAGGAATTTTTTCATAACAGTCTTA GAGATATTTTCAAATCTAAAAAGTAGGACATCTAAAGAAGGAAATAAATTTCACAGCTTATTATTATATT AGTAAAAATTGCCAGGTTATTTTCATTTTCAGTAGAAAAAAATTGATGTCTGTAAAAAAAAATGACAAAC TTCTTGATACATTTAATCTGCAATTCAACAAATAGTATTATTGTTGTAGCTTGATAGTTAACAACTGTTG CTGTGCACCACTGAACTTACAGTAAAGAAAGTTTTTCTTATGTTTGAAGGATTGTTACTCTAATAAAAAC TTGAAGGCTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

| Restriction Sites: | Rsrll-Notl |
| :--- | :--- |
| ACCN: | NM_012011 |
| Insert Size: | 1419 bp |

OTI Disclaimer:

## Components:

Reconstitution Method:

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).

1. Centrifuge at $5,000 \times \mathrm{xg}$ for 5 min .
2. Carefully open the tube and add 100 ul 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 5000 xg ) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$.

| RefSeq: | BC043656 |
| :--- | :--- |
| RefSeq Size: | 1809 bp |
| RefSeq ORF: | 1419 bp |
| Locus ID: | 26908 |
| UniProt ID: | $\underline{\text { Q9Z0N2 }}$ |

Cytogenetics: Ypter
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 40 S ribosomal complex, a step that determines the rate of protein translation. This step is followed by mRNA binding to form the $43 S$ pre-initiation complex. Junction of the 60 S ribosomal subunit to form the 80 S 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 (PubMed:26823431).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.

