

## Product datasheet for SC117677

### EIF2S2 (NM\_003908) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EIF2S2 (NM_003908) Human Untagged Clone
Tag:	Tag Free
Symbol:	EIF2S2
Synonyms:	eIF-2-beta; EIF2; EIF2B; EIF2beta; PPP1R67
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_003908 edited  
 GAATTCGGCACGAGGCTTTCGCTGATGCAAGAGCCTAGTGCGGTGGTGGGAGAGGTATCG  
 GCAGGGCAGCGCTGCCCGGGGCTGGGGCTGACCCGCTGACTTCCCGTCCGTGCCG  
 AGCCCACTCGAGCCGAGCCATGTCTGGGACGAGATGATTTTTGATCCTACTATGAGCA  
 AGAAGAAAAAGAAGAAGAAGAAGCCTTTTATGTTAGATGAGGAAGGGGATACCCAAACAG  
 AGGAAACCCAGCCTTCAGAAACAAAAGAAGTGGAGCCAGAGCCAAGTGGAGACAAGGATT  
 TGGAAAGCTGATGAAGAGGACACTAGGAAAAAGATGCTTCTGATGATCTAGATGACTTGA  
 ACTTCTTTAATCAAAAGAAAAAGAAGAAAAAACTAAAAAGATATTTGATATTGATGAAG  
 CTGAAGAAGGTGTAAGGATCTTAAGATTGAAAGTGTGTTCAAGAACCAACTGAACCAG  
 AGGATGACCTTGACATTATGCTTGGCAATAAAAAAGAAGAAAAAGAAGTGAAGTTCC  
 CAGATGAGGATGAAATACTAGAGAAAGATGAAGCTCTAGAAGATGAAGACAACAAAAAG  
 ATGATGGTATCTCATTTCAGTAATCAGACAGGCCCTGCTTGGGCAGGCTCAGAAAGAGACT  
 ACACATACGAGGAGCTGCTGAATCGAGTGTCAACATCATGAGGGAAAAGAAATCCAGATA  
 TGGTTGCTGGGGAGAAAAGGAAATTTGTCATGAAACCTCCACAAGTCCGAGTAGGAA  
 CCAAGAAAACCTCTTTTGTCAACTTTACAGATATCTGTAACTATTACATCGTCAGCCCA  
 AACATCTCCTTGCATTTTTGTTGGCTGAATTGGGTACAAGTGGTCTATAGATGGTAATA  
 ACCAAGTGTAAATCAAAGGAAGATTCCAACAGAAACAGATAGAAAATGTCTTGAGAAGAT  
 ATATCAAGGAATATGTCACCTTGTACACATGCCGATCACCGACACAATCCTGCAGAAGG  
 ACACAGACTCTATTTCCCTACAGTGCAGAACTTGTCTTCTAGATGTTCTGTTGCCAGTA  
 TCAAAACCGGCTTCCAGGCTGTACGGGCAAGCGAGCACAGCTCCGTGCCAAAGCTAACT  
 AATTTGCTAATCACTGATTTTGCAGGCTTGTGTGGAGATGTGGCTGGCAGGTTTGGC  
 ATCAGAGTGGATATACCGTTGTATTAACAAGATAAAAAAGCTGCCAAGATTTTTGGC  
 GAGTGGTTGGTCTGAAGTCTTGCAGACGCTGATGCTCAAGCTGTTGACATACTCATTG  
 CCTACTTTAACACCTGTGAGAGAAACGTGATATGGGGTAAGGAGGTGCTTTTTTAAATC  
 GTTCATAGACTTCTGAAAAATGCAAGATAAAATTAAGTTATTATAACAGTAAAAAAA  
 AAAAAAACTCGAC



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_003908 unedited  
 GGCTTTAGNATTTGTATACGACTCCTATAGGCGGCCGCGNAATTCGCACGAGGCTTTCGC  
 TGATGCAAGAGCCTAGTGCGGTGGTGGGAGAGGTATCGGCAGGGGCAGCGCTGCCGCCGG  
 GGCCTGGGGCTGACCCGTCTGACTTCCCGTCCGTGCCGAGCCACTCGAGCCGCAGCCAT  
 GTCTGGGACGAGATGATTTTTGATCCTACTATGAGCAAGAAGAAAAAGAAGAAGAA  
 GCCTTTTATGTTAGATGAGGAAGGGGATACCCAAACAGAGGAAACCCAGCCTTCAGAAAC  
 AAAAGAAGTGGAGCCAGAGCCAACTGAGGACAAGGATTTGGAAGCTGATGAAGAGGACAC  
 TAGGAAAAAAGATGCTTCTGATGATCTAGATGACTTGAACCTTCTTTAATCAAAGAAAA  
 GAAGAAAAAACTAAAAAGATATTTGATATTGATGAAGCTGAAGAAGGTGTAAGGATCT  
 TAAGATTGAAAGTATGTTCAAGAACCACTGAACCAGAGGATGACCTTGACATTATGCT  
 TGGCAATAAAAAGAAGAAAAAGAAGATGTTAAGTTCAGATGAGGATGAAATACTAGA  
 GAAAGATGAAGCTCTAGAAGATGAAGACAACAAAAAGATGATGGTATCTCATTGAGTAA  
 TCAGACAGGCCCTGCTTGGGCAGGCTCAGAAAGAGACTACACATACGAGGAGCTGCTGAA  
 TCGAGTGTCAACATCATGAGGGAAAAGATCCAGATATGGTTGCTGGGAGAAAAAGAAA  
 TTTGTCATGAAACCTCCACAGTCGTCGAGTAGGAACCAAGANAACCTCTTTTGTNCACT  
 NTACAGATATCTGGTAACTATTACATCGTCAGCNCAACATCTCCTTGCATTNTTGTGG  
 CTGAATG

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_003908 unedited  
 CCCGCATTCTAGAGTCGAGTTTTTTTTTTTTTTTTTCACTGTTATAATAACTTTAATTT  
 ATCTTGCAATTTACAGAAGTCTATGAACGATTTTAAAAAGCACCTCCTTACCCCATATC  
 ACGTTTCTCTGACAGGTGTTAAAGTAGGCAATGAGTATGTCAACAGCTTGAGCATCAGCG  
 TCTTGCAAGGACTTCAGACCAACCACTCGCCAAAATCTTGGCAGCTTTTTTATCTTGTT  
 TTTAATACAACGGTATATCCACTCTGATGGCAAACCTGTCCAGCCACATCTCCACAACAA  
 GCTTTGCAAAATCAGTGATTAGCAAATTAGTTAGCTTTGGCAGGAGCTGTGCTCGCTTG  
 CCCGTGACAGCCTGGAAGCCGGTTTTGATACTGGCAACAGAACATCTAGAATGACAAAGTT  
 TCGCACTGTAGGAAATAGAGTCGTGTCTTCTGCAAGATTGTGTCGGGTGATCGGCAT  
 GTGTGACAAGTGACATATTCCTTGATATATCTTCTCAAGACATTTTCTATCTGTTTCTGT  
 TGAATCTTCTTTGATTACAAGTTGGTTATTACCATCTATAGAACCCTTGACCCAAT  
 TCAGCCAAACAAAAATGCAAGGAGATGTTTGGGCTGACGATGTAATAGTTTACAGATATCT  
 GTAAAGTTGACAAAAGAAGTTTTCTTGGTCTACTCGGACGACTTGTGGAGGTTTCATG  
 ACAAAATTCCTTTTCTCCCAACCATATCTGAATCTTTTCCCTCATGATGTTGAACA  
 CTCCGATCAGCAGCCTCTCGTATGTGTAGTCTTTTTGAGCCTGCCAAGCAGGGCCTG  
 TCTGATTACTGAATGAGAAACCATCATCTTTTTTGTGCTTCTTCTAGAGCTNCA  
 CCTTCTAGACTTCAACCTCATCTGGGAACCTAACATTCTTCTTTTCTTTTATTGC  
 CAGCATATGCAGGNATCCTCTGGTTAATTGGTCTAGACTCACTTAT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_003908

**Insert Size:**

1430 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\\_003908.2](#), [NP\\_003899.2](#)

**RefSeq Size:** 1439 bp

**RefSeq ORF:** 1002 bp

**Locus ID:** 8894

**UniProt ID:** [P20042](#)

**Cytogenetics:** 20q11.22

**Domains:** eIF2B\_5

**Gene Summary:** Eukaryotic translation initiation factor 2 (EIF-2) functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA and binding to a 40S ribosomal subunit. EIF-2 is composed of three subunits, alpha, beta, and gamma, with the protein encoded by this gene representing the beta subunit. The beta subunit catalyzes the exchange of GDP for GTP, which recycles the EIF-2 complex for another round of initiation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest 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.