

Product datasheet for SC117805

EIF3A (NM_003750) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EIF3A (NM_003750) Human Untagged Clone
Tag:	Tag Free
Symbol:	EIF3A
Synonyms:	EIF3; eIF3-p170; eIF3-theta; EIF3S10; P167; p180; p185; TIF32
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117805 sequence for NM_003750 edited (data generated by NextGen Sequencing)

```

ATGCCGGCCTATTTTCAGAGGCCGAAAAATGCCCTCAAACGCGCCAACGAATTTCTTGAG
GTTGGCAAAAAGCAGCCTGCTCTGGATGTTCTTTATGATGTTATGAAAAGTAAAAAACAT
AGAACATGGCAAAAAGATACACGAACCAATTATGTTGAAATACTTGAACTTTGCGTGGAT
CTTCGCAAGAGCCACTTGGCAAAGGAGGGTTATACCAGTATAAGAACATTTGTCAACAG
GTGAACATAAAATCTCTGGAGGATGTTGTTAGGGCATATTTGAAAATGGCAGAGGAAAAA
ACTGAAGCTGCTAAAGAAGAATCTCAGCAGATGGTCTTAGATATAGAGGATCTAGATAAT
ATTCAACTCCTGAGAGTGTTCCTAAGTGTGTAAGTGGTGAAGACACTCAGGATCGT
ACTGACAGATTACTTTTAACTCCATGGGTAAATTCCTGTGGGAGTCTTACAGGCAGTGT
TTGGACCTTCTTAGAAACAATTCTAGAGTAGAGCGCCTGTACCATGATATTGCCAGCAA
GCTTTCAAATTCGCCTCCAATACACGCGTAAGGCTGAATTCGGTAACTGTGTGACAAT
TTGAGAATGCACTTATCGCAGATTCAGCGCCACCATAACCAAAGTACGGCAATCAATCTT
AATAATCCAGAGAGCCAGTCCATGCATTTGGAAACCAGACTTGTTCAGCTGGACAGTGCT
ATCAGCATGGAATTGTGGCAGGAAGCATTCAAAGCTGTGGAAGATATTCACGGGCTATTC
TCCTTGCTAAAAAACCCCTAAACCTCAGTTGATGGCAAATTAATAACAAAGTCTCA
ACTGTGTTTTGGAAATCTGGAATGCTCTTTTTCATGCATCTACACTCCATCGTCTTTAC
CATCTCTCTAGAGAAATGAGAAAGAATCTCACACAAGACGAGATGCAAAGAATGTCTACT
AGAGTCCCTTTTAGCCACTCTTTCCATCCCTATTACTCCTGAGCGTACGGATATTGCTCGA
CTTCTGGATATGGATGGCATTATAGTTGAAAAACAGCGTCGCCTTGCAACACTACTAGGT
CTTCAAGCCCCACCGACACGAATTGGCCTTATTAAATGATATGGTCAAGATTAATGTAATA
CAATATGTTGTCCAGAAGTGAAGACCTTTACAATTGGCTTGAAGTAGAATTTAACCCA
TTAAAACCTCTGTGAGCGAGTACAAAAGTTCTAAATTGGGTTAGGGAACAACCTGAAAAG
GAACCGGAATTGCAGCAGTATGTGCCACAACCTGCAAAAACAACACCATCCTCCGCTTCTG
CAGCAGGTGTACAGATTTATCAGAGCATTGAGTTTTCTCGTTTGACTTCTTTGGTTCTT
TTTGTGATGCTTTCAAACCTGGAACGGGCCATAGTAGATGCAGCCAGGCATTGCGACTTG
CAGGTTCTGATTGATCACACTTCTCGGACCTGAGTTTTGGATCTGATTTGAATTATGCT

```



View online »

ACTCGAGAAGATGCTCCGATTGGTCTCATTTGCAAAGCATGCCTTCAGAGCAGATAAGA
 AACCAGCTGACAGCCATGTCTCAGTACTTGCAAAAGCACTTGAAGTCATTAAACCAGCT
 CATATACTGCAAGAGAAAAGAAGAACAGCATCAGTTGGCTGCTACTGCATACCTTAAAAAT
 TCACGAAAAGAGCACCAGCGGATCTGGCTCGCCGCCAGACAATTGAGGAGAGAAAAGAG
 CGCCTTGAGAGTCTGAATATTCAGCGTGAGAAAAGAAGAATTGGAACAGAGGGAAGCTGAA
 CTCCAGAAAAGTGCGBAAGGCTGAGGAAGAGAGGCTGCGCCAGGAAGCAAAGGAGAGAGAG
 AAGGAGCGTATCTTACAGGAACATGAACAAATCAAAAAGAAAACGTGCCGAGAGCGTTTG
 GAGCAGATCAAGAAAACAGAACTGGGTGCCAAAGCATTCAAAGATTGATATTGAAGAC
 CTTGAGGAATTGGATCCAGATTTTATCATGGCTAAACAGGTTGAACAACCTGGAGAAAAGAA
 AAGAAAGAACTTCAAGAACGCCTAAAGAATCAAGAAAAGAAGATTGACTATTTTGAAGA
 GCCAAACGTTTGAAGAAATTCCTTTGATAAAGAGCGCTTACGAGGAACAGAGAATTAA
 GACATGGATCTGTGGGAGCAACAAGAGGAAGAAAGAATTACTACAATGCAGCTAGAACGT
 GAAAAGGCTCTTGAACATAAGAATCGAATGTCACGAATGCTTGAAGACAGAGATTTATTC
 GTAATGCGACTCAAAGCTGCACGGCAGTCTGTTTATGAGGAAAACTTAAACAGTTTGAA
 GAGCGATTAGCAGAAGAAAGGCATAATCGATTGGAAGAACGAAAAGGCAGCGTAAAGAA
 GAACGCAGGATAACATACTATAGAGAAAAAGAAGAGGAGGAGCAGAGAAGGGCAGAAAGAA
 CAAATGCTAAAAGAGCGGGAAGAGAGAGAGCGCCGAACGAGCAAAAACGCGAGGGAAGAG
 CTACGAGAGTATCAGGAGCGGTGAAGAAATTAGAAGAAGTGAAGGAAAAAACGCCAA
 AGGGAGTTGGAATTGAAGAACGAGAACGGCGTAGAGAGGAAGAGAGAAGACTTGGCGAT
 AGTTCCCTTTCTAGAAAGGACTCTCGTTGGGGAGATAGAGATTCAGAAGGCACCTGGAGA
 AAAGGACCTGAAGCAGATTCTGAGTGGAGAAGAGGCCCGCCAGAGAAGGAGTGGAGACGT
 GGAGAAGGGCGAGATGAGGACAGGTCTCATAGAAGAGATGAAGAGCGGCCCGGCGTCTG
 GGGGATGATGAAGATAGAGAGCCCTCTCTTAGACCAGACGATGATCGGGTTCCCGGCGT
 GGCATGGATGATGACAGAGGCCCTAGACGTGGTCTGAGGAAGATAGGTTCTCTCGTCGT
 GGGGCAGACGATGACCGGCTTCTGGCGTAACACAGATGATGACAGGCCTCCCAGACGA
 ATTGCCGATGAAGACAGGGGAACTGGCGTCATGCGGATGATGACAGACCACCTAGACGA
 GGACTGGATGAGGACAGAGGAAGCTGGCGAACAGCTGATGAGGACAGAGGACCAAGACGT
 GGGATGGATGATGACCGGGGCGAGGCGAGGAGGCGCTGATGATGAGCGATCATCTGG
 CGTAATGCTGATGATGACCGGGTCCCAGGCGAGGTTGGATGATGATCGGGTCCCAGG
 CGAGGCATGGATGATGACCGGGTCCCAGGCGAGGCATGGATGATGACCGGGTCCCAGG
 CGAGGCATGGATGATGACCGGGTCCCAGGCGAGGTTGGATGATGATCGAGGACCTTGG
 AGGAACCGCGATGATGACAGAATCCCAGGCGTGGTGCAGAGGATGACAGGGGCCCTTGG
 AGAAACATGGATGATGATCGCCTTTCAAGACGTGCTGATGATGATCGGTTTCCCAGACGG
 GGTGATGACTCAAGACCTGGTCTTGGAGACCATTAGTCAAGCCAGTGGATGGAGAGAG
 AAAGAAAAGCCAGAGAGGAGAGCTGGGGTCCACTCGAGAATCAAGGCCATCAGAAGAA
 CGTGAATGGGACAGAGAAAAGAAAGGGACAGAGATAATCAAGATCGGGAGGAGAATGAC
 AAGGACCTGAGAGAGAAAAGGGACAGAGAGAGATGTGGATCGAGAGGATCGCTTCAAG
 AGACCTAGGGATGAAGGTGGCTGGAGAAGAGACCAGCTGAGGAATCTTCAAGCTGGAGA
 GACTCAAGTCGCCGGGACGATAGGGATAGGGATACCGTGCCTGAGAGGGATGACCCG
 CGTGATCTAAGAGAAAGACGAGATCTAAGAGACGACAGGGACCGAAGAGGACCTCCACTC
 AGATCAGAACGTGAAGAAGTAAGTTCTTGGAGACGTGCTGATGACAGGAAAGATGACCGG
 GTGGAAGAGCGGGACCCTCCTCGTCGAGTTCTCCCCAGCTCTTTCAAGAGACCAGAA
 AGAGACCGAGACCGAGAAAGAGAAGGTGAAAAGAGAAGGCCTCATGGAGAGCTGAGAAA
 GATAGGGAATCTCTCCGTCGTAATAAAATGAGACTGATGAAGATGGATGGACCACAGTA
 CGACGTTAA

Clone variation with respect to NM_003750.2
 939 t=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003750 unedited
 GTTCACATTTGTATACGACTCCTATAGGGCGGCCGCAATTCGCACGAGGGCGGGCGACT
 GCTGGCGAGGGCGGTGGGACCTTACGCTGGTCCCCTTCGTCTCCTCCTCCCGCCCGGGC
 CACTAGAGAGTTTCGCTGACGCCGGGTGAGCTGAGCCTGCCGCCAAGATGCCGGCCTATTT
 TCAGAGGCCGAAAAATGCCCTCAAACGCGCCAACGAATTTCTTGAGGTTGGCAAAAAGCA
 GCCTGCTCTGGATGTTCTTTATGATGTTATGAAAAGTAAAAACATAGAACATGGCAAAA
 GATACACGAACCAATTATGTTGAAATACTTGAACTTTGCGTGGATCTTCGCAAGAGCCA
 CTTGGCAAAGGAGGGTTATACCAGTATAAGAACATTTGTCAACAGGTGAACATAAAATC
 TCTGGAGGATGTTGTTAGGGCATATTTGAAAATGGCAGAGGAAAAAACTGAAGCTGCTAA
 AGAAGAATCTCAGCAGATGGTCTTAGATATAGAGGATCTAGATAATATTCAAACCTCTGA
 GAGTGTCTCCTAAGTGTGTAAGTGGTGAAGACACTCAGGATCGTACTGACAGATTACT
 TTTAACTCCATGGGTTAAATTCCTGTGGGAGTCTTACAGGCAGTGTGGACCTTCTTAG
 AAACAATTCTAGAGTAGAGCGCCTGTACCATGATATTGCCAGCAAGCTTCAAATCTCG
 CCTCCCATACACGCGTAAGGCTGAATTCGTAACCTGTGTGACAATTTGAGAATGCACTT
 ATCGCAGATTCAGCGCCACCATAACCAAAGTACGGCAATCAATCTTTAATATTCCANAGA
 GCCCAGTCATGCATTTGGAAACCAGACTTGNTCAGCTGGACAGTCTATCGCATGTAATT
 GTGGCAGGAGCATTCAAGCTGTGGAGGA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003750 unedited
 TATGGCCGCGGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTGTCAACAAATGAT
 TGATGAAATAATGCAACACCCCTTAAATTCAAAAAATGGCATGGTTTTTCCAACCTCCTG
 TGGATATGGTGCATGATCAATCTATTATATAGGATTAATACAAGTTCATGCTTTTTGTGT
 TATGGGAAACAACATTAAGAATCCAATTTAGATTGGTTGAAGCACAAGCCATAATAAT
 CCTTGAATGTGATCAAACCTATTTAAGACACCCGCTTAAATCCATTATCTTGAGACTTAA
 CGCCGCACTGTGGTCCATCCATCTTTATCATTTTCACTTTTAGTACGACGCGAGAGATTC
 CCTATCTTTCTCAGCCCTCCATGAGGCCTTTTTTTTTTACCTTCTTTCTCGGTCTCG
 GTCTCTTTCTCGTTTTTTGAAAGACCTGGGGGCGGAACCTCGACCAGGAGGGCTTTGCTC
 TTTACCCGCGCCATCTTCCCTGTTATATCATCTCCACCAACTTACTTCCCTACGTTCCG
 ATCTGACCGGATGATCTCTCCGCCCTGTTGCCCTTATATCTCTCCCTTCTTCTTAGAT
 CCAGTCCGTTATTTCTTTTACGGCGACGGCCATCCCTACCCCCATCCCCCGTGACTCG
 TGCCCTTCCCTCTGTACCTTCCCTCTCGCTCTCCTATTCTCCACCTTCATCTTTGTCTCC
 CCATTCACCTCCTTTTACCCCTTTTTTTTCTCCCTTATCCCAGTGCCTTTTCTTCT
 TCCCCACGCTCCCATCTTTGTTCTCCTTCTTCCCCGCTAATACATCTCCCCCATGG
 CACTATTTCTTTCCGCCCAATTTATCTGCCCCCCCCCTCTCTCCCCCCCCCTTCT
 TCCCCGTCCTAGTCCCCCCCCCCCCCGCCCTTCTCCCTTACCCTCTCCCCCTCTC
 TTTCTCCN

Restriction Sites:

NotI-NotI

ACCN:

NM_003750

Insert Size:

4470 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_003750.1](#), [NP_003741.1](#)

RefSeq Size: 5256 bp

RefSeq ORF: 4149 bp

Locus ID: 8661

UniProt ID: [Q14152](#)

Cytogenetics: 10q26.11

Domains: PCI

Gene Summary:

RNA-binding component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis (PubMed:17581632, PubMed:25849773). The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNA_i 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 (PubMed:17581632, PubMed:11169732). 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 (PubMed:25849773, PubMed:27462815). [UniProtKB/Swiss-Prot Function]