

Product datasheet for **SC108421**

EIF3B (NM_003751) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EIF3B (NM_003751) Human Untagged Clone
Tag:	Tag Free
Symbol:	EIF3B
Synonyms:	EIF3-ETA; EIF3-P110; EIF3-P116; EIF3S9; PRT1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_003751, the custom clone sequence may differ by one or more nucleotides

```
ATGCAGGACGCGGAGAACGTGGCGGTGCCGAGGCGGCCGAGGAGCGCGCCGAGCCCGGCCAGCAGCAGC
CGGCCCGCGAGCCGCGCCAGCCGAGGGGCTGCTGCGGCCCGGGGGCCCGCGCTCCGGAGCCCGGG
GACCGAGGCTCCAGTGAGGAGGTGGGATCGCGGAGGCCGGCCGGAGTCCGAGGTGAGGACCGAGCCG
GCGGCCGAGGCAGAGGCGCCTCCGGCCCGTCCGAGTCGCCCTCGCCCGGCGCCGAGGAGCTGCCCG
GGTCGCATGCTGAGCCCTGTCCCGGCACAGGGCGAGGCCCCAGGAGAGCAGGCTCGGGACGAGCGCTC
CGACAGCCGGGCCAGGCGGTGTCCGAGGACGCGGGAGGAAACGAGGGCAGAGCGGCCGAGGCCGAACCC
CGGGCGTGGAGAACGGCGACGCGGACGAGCCCTCCTTCAGCGACCCGAGGACTTCGTGGACGACGTGA
GCGAGGAAGAATTACTGGGAGATGTAACAAGATCGGCCCCAGGAAGCAGATGGAATCGATTGGTGAT
TGTAAGTGGACAATGTCCCTCAGGTGGGACCCGACCGACTTGAGAACTCAAAAATGTCATCCACAAGATC
TTTTCAAAGTTTGGAAAATCACAATGATTTTTATCCTGAAGAGGATGGGAAGACAAAAGGATATTTT
TCCTGGAGTACGGTCCCCTGCCACGCTGTGGATGCTGTGAAGAACGCCGACGGCTACAAGCTTGACAA
GCAGCACACATCCGGGTCAACCTCTTTACGGATTTTGACAAGTATATGACGATCAGTGACGAGTGGGAT
ATTCCAGAGAAAACAGCCTTTCAAAGACCTGGGGAACCTACGTTACTGGCTTGAAGAGGCAGAATGCAGAG
ATCAGTACAGTGTGATTTTTGAGAGTGGAGACCGCACTTCCATATTCTGGAATGACGTAAGGACCCCTGT
CTCAATTGAAGAAAGAGCGAGATGGACAGAGACGTATGTGCGTTGGTCTCCTAAGGGCACCTACCTGGCT
ACCTTTTCATCAAAGAGGCATTGCTCTATGGGGGGGAGAGAAAATCAAGCAAAATTCAGAGATTCAGCCACC
AAGGGTTTCAGCTTATTGACTTTCACCTTGTGAAAGGTACCTGGTGACCTTTAGCCCCCTGATGGACAC
GCAGGATGACCCCTCAGGCCATAATCATCTGGGACATCCTACGGGGCACAAGAAGAGGGGTTTTCACTGT
GAGAGCTCAGCCATTGGCCTATTTTTAAGTGGAGCCATGATGGCAAATCTTTGCCGAATGACCCCTGG
ATACGCTTAGCATCTATGAAACTCCTTCTATGGGTCTTTTGACAAGAAGAGTTTGAAGATCTCTGGGAT
AAAAGACTTTTCTGGTCTCCTGGTGGTAACATAATCGCCTTCTGGGTGCCTGAAGACAAAAGATATTCCA
GCCAGGTAACCCCTGATGCAGCTCCCTACCAGGCAAGAGATCCGAGTGAGGAACCTGTTCAATGTGGTGG
ACTGCAAGCTCCATTGGCAGAAGAACGGGAGACTACTTGTGTGTAAGTAGATAGGACTCCGAAAGGCAC
CCAGGGTGTGTACAAAATTTGAAATTTCCGAATGAGGGAGAAAACAGGTACCTGTGGATGTGGTTCGAG
ATGAAAGAAACCATCATAGCCTTGCCTGGGAACCAAATGGAAGTAAGTTTGCTGTGCTGCACGGAGAGG
CTCCGCGGATATCTGTGCTTTTACCACGTCAAAAACAACGGGAAGATTGAACTCATCAAGATGTTTGA
CAAGCAGCAGGCGAACCCATCTTCTGGAGCCCCAAGGACAGTTCGTGGTGTGGCGGGCCTGAGGAGT
ATGAACGGTGCCTTAGCGTTTGTGGACTTTCGACTGCACGGTATGAACATCGCAGAGACTACATGG
CTCCGACGTGCAATGGGATCCTACTGGGCGCTACGTCGTCACCTCTGTGCTCCTGGTGGACCATAAAGT
GGACAACGCGTACTGGCTGTGGACTTTCAGGGACGCCTCCTGCAGAAGAACAACAAGGACCGCTTCTGC
CAGCTGCTGTGGCGGCCCGCCCTCCACACTCCTGAGCCAGGAACAGATCAAGCAAATTAAGGATC
TGAAGAAATACTAAGATCTTTGAACAGAAGGATCGTTTGAGTCAGTCCAAAGCCTCAAAGGAATTGGT
GGAGAGAAGGCGCACCATGATGGAAGATTTCCGGAAGTACCGGAAAATGGCCAGGAGCTCTATATGGAG
CAGAAAAACGAGCGCCTGGAGTTGCGAGGAGGGTGGACTACTGACGAGCTGGACAGCAACGTGGACGACT
GGGAAGAGGAGACCATTGAGTTCTCGTCACTGAAGAAATCATTCCCCTCGGGAATCAGGAGTGA
```

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_003751 unedited CTCACTATAGGGCGGCCGGAATTTCGGCACGAGGAGCGCGGCGGCCGCGGAGCCCTGCGA GTAGGCAGCGTTGGGCCCATGCAGGACGCGGAGAACGTGGCGGTGCCCGAGGCGGCCGAG GAGCGCGCCGAGCCCGGCCAGCAGCAGCCGGCCGCGAGCCGCCAGCCGAGGGGCTG CTGCGGCCCGGGGCCCGGCCCTCCGGAGGCCGCGGGACCAGGCCTCCAGTGAGGAG GTGGGGATCGCGGAGGCCGGGCCGAGCCGAGGTGAGGACCGAGCCGGCGGCCGAGGCA GAGGCGGTCTCCGGCCCGTCCGAGTCGCCCTCGCCCGCGGCCCGAGGAGCTGCCCGGG TCGCATGCTGAGCCCTGTCCCAGCACAGGGCGAGGCCNCAGGAGAGCAGGCTCGGGAC GAGCGCTCCGACAGCCGGGCCAGGCGGTGTCCGAGGACGCGGGAGGAAACGAGGGCAGA GCGGCCGAGGCCGAACCACGGACGCTGGAGAACGGCGACGCNGACGAGCCCTNCTTCATC GACCCCGAGACTTCGTGGACGACGTGAGCGAGGAAGGAATACTGGAGATGTAAGCAGAG ATCCGGCCAGGAATCAGATGGAACCGATCGGTGATTGCAGTGGACAATGTCCCTCATG TGGGTACCCGACCGACTCGAAAACTCAGAAATGCATCCACATGATCCTTTCCAAGCTT GCGACAATCACAATGATTTTTATGCTGAAGAGGATGGGAAGACAAAAGGTCTATGTTA CTGGAGTACGCGTCCCCTGCCACCGCTGAGATGCTGTGAATACGCCGACGCNTACAGCCT GACAGCACACATTCCGGTCAACCTCTTACGGTTTGACAGTTATGACGATCGTGACAGT GGGATCTGCAAGGACAGCTTTAAGACTGGGGACTACGTAAGTCTGAGAGCNTAAGCNGA ATCATCAGGGGATTTTTAAGGAAACGGCTCCTACTCGG</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_003751 unedited CCGCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTTAATAACAAGTTTGCTTTTATTTCCA TGTTCAACCTGCGGAGAAAACCGGCCACAACCTGCACGGTGGGGGTACAAGGCATGGCGG CGCCCTCCCGGTGGGTCTCCGGGACACGTCCAGCACTGCCCGCAATGGGGATGCAAGTCC TTCAACGGAATGCTGCTCGGCTGTGTACAGGCACCGTGGAACATCACTGGGCGCAGGA GAAGGTGCCGCCAGTGGCGTTCGCTAAGTCTTCGGAGCCAACGCCGGCGTTCCAACAGAA AACTCAAACAAGAAAGAAGTGGAAAGCGGGTGCCTTAAATCCCCCACTGCAGACACCAGG GGCTGAAAGGCACAAAAATGTGTGCAATGGCAGAATCCAGGCGCAGTCACAGTCCAGAG CCAGAGAGCACAGGGAGGAGCGGGAGTACGCGGCTTCTGCAGGACGGCCTCGGCTCC ACAGCACACACGGCACAGTGTCCAGGTCACTCCTGATTCCCAGGGGAATGATTTCTTC AGTGACGAAGAACTCAATGGTCTCCTCTTCCCAGTCGTCACGTTGCTGTCCAGTCGTC AGTGTCCACCCCTCCTCGAACTCCAGGCGCTCGTTGTTCTGCTCCATATAGAGCTCCTG GGCTTTTTCCGGTACTTCCGAAATCTCCATCATGGGGCGCCTTCTCTCCACCATTCC CTTGGAGGCTTTGGACTGACTCAAACGATCCTTCTGTTCAAAGATCTAGAGTATTCTTTT AGAACCTTTTCAATATGCTCGAACCGGTCCCTGGCTCAAGAGTGTGGAAAGCCGGGGCCC CCCCACCATCTGGCATAACCGTCCCTGATGTTCTTTTGCAGAAGGGTCTGAAAGGTCCA AACATCACCGTGGCCACTCATGCTTCCAAAACAAAGGGACACTACCCCAATAGAACC TCCACCCGGAACCTTTTGCCTCGCAGGTATACCC</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_003751
Insert Size:	3000 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_003751.2](#), [NP_003742.2](#)

RefSeq Size: 3009 bp

RefSeq ORF: 3009 bp

Locus ID: 8662

UniProt ID: [P55884](#)

Cytogenetics: 7p22.3

Domains: RRM

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:9388245, PubMed:17581632, PubMed:25849773, PubMed:27462815). The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAⁱ 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:9388245, PubMed:17581632). 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). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) differs in the 3' UTR compared to variant 2. Variants 1, 2 and 3 encode the same isoform (1).