

Product datasheet for **RG209955**

EIF4B (NM_001417) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EIF4B (NM_001417) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EIF4B
Synonyms:	EIF-4B; PRO1843
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG209955 representing NM_001417
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGCGCCTCAGCAAAAAAGAAGAATAAGAAGGGGAAGACTATCTCCCTAACAGACTTTCTGGCTGAGG
ATGGGGTACTGGTGGAGGAAGCACCTATGTTTCCAAACCAGTCAGCTGGGCTGATGAAACGGATGACCT
GGAAGGAGATGTTTCGACCACTTGGCACAGTAACGATGACGATGTGTATAGGGCGCCTCCAATTGACCGT
TCCATCCTTCCACTGCTCCACGGGCTGCTCGGGAACCAATATCGACCGGAGCCGTCTTCCAAATCGC
CACCTACACTGCTTTTCTAGGAAACCTACCCTATGATGTTACAGAAGAGTCAATTAAGGAATCTTTTCG
AGGATTAATATCAGTGCAGTGCCTTACCACGTGAACCCAGCAATCCAGAGAGGTTGAAAGTTTTGGT
TATGCTGAATTTGAGGACCTGGATTCCTGCTCAGTGCCTGAGTCTCAATGAAGAGTCTCTAGGTAACA
GGAGAATTCGAGTGGACGTTGCTGATCAAGCACAGGATAAAGACAGGGATGATCGTTCTTTGGCCGTGA
TAGAAATCGGATTTCTGACAAAACAGATACAGACTGGAGGGCTCGTCTGCTACAGACAGCTTTGATGAC
TACCCACCTAGAAGAGGTGATGATAGCTTTGGAGACAAGTATCGAGATCGTTATGATTACAGCCGGTATC
GGGATGGGTATCGGGATGGGTATCGGGATGGCCACGCCGGGATATGGATCGATATGGTGGCCGGGATCG
CTATGATGACCGAGGCAGCAGAGACTATGATAGAGGCTATGATCCCGGATAGGCAGTGGCAGAAGAGCA
TTTGGCAGTGGGTATCGCAGGGATGATGACTACAGAGGAGCGGGGACCCTATGAAGACCGATATGACA
GACGGGATGATCGGTCTGGAGCTCCAGAGATGATTACTCTCGGGATGATTATAGCGTGTATGATAGAGG
TCCCCCAGAACCCAACTGAATCTAAAGCCTCGGAGTACTCCTAAGGAAGATGATTCCTCTGCTAGT
ACCTCCAGTCCACTCGAGCTGCTTCTATCTTTGGAGGGGCAAAGCCTGTTGACACAGCTGATAGAGAAA
GAGAAGTAGAAGAACGGCTACAGAAGAAACAAGAGAAGTTGCAGCGTCAGCTGGATGAGCCAAAATAGA
ACGACGGCCTCGGAGAGACACCCAAGCTGGCGAAGTGAAGAACTCAGGAACGGGAACGGTTCGAGGACA
GGAAGTGAGTCATCACAACCTGGGACCTCCACCACATCTAGCAGAAATGCACGAAGGAGAGAGAGTGAGA
AGTCTCTAGAAAATGAAACACTCAATAAGGAGGAAGATTGCCACTCTCCAACCTTAAACCTCCCAAAC
TGATCAGCCCCTAAAGGTAATGCCAGCCCTCCACCAAAGGAGAATGCTTGGGTGAAGCGAAGTTCTAAC
CCTCTGCTCGATCTCAGAGCTCAGACACAGAGCAGCAGTCCCCTACAAGTGGTGGGGGAAAAGTAGCTC
CAGCTCAACCATCTGAGGAAGGACCAGGAAGGAAAGATGAAAATAAAGTAGATGGGATGAATGCCCAA
AGGCCAACTGGAACTCTAGCCGTGGTCCAGGAGACGGAGGAAACAGAGACCACTGGAAGGAGTCAGAT
AGGAAAGATGGCAAAAAGGATCAAGACTCCAGATCTGCACCTGAGCCAAAGAACTGAGGAAAATCCAG
CTTCTAAGTTGATTTCTGCAAGCAAGTATGCTGCTCTCTGTTGATGGTGAAGATGAAAATGAGGGAGA
AGATTATGCCGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG209955 representing NM_001417
Red=Cloning site Green=Tags(s)

MAASAKKKNKKGKTIISLTDFLAEDGGTGGGSTVYVSKPVSWADETDDLEGDVSTTWHSNDDDVYRAPPIDR
SILPTAPRAAREPNIDRSRLPKSPPYTAFLGNLPYDVTEESIKEFFRGLNISAVRLPREPSNPERLKGFG
YAEFEDLDSLLSALSLNEESLGNRRIRVDVADQAQDKDRDRSFGRDRNRSDKTDTDWRARPATDSFDD
YPPRRGDSFGDKYRDRYDSRYRDGYRDGYRDGPRRDMDRYGGRDRYDDRGSRDYDRGYDSRIGSGRRA
FGSGYRRDDYRGGDRYEDRYDRDRSWSRRDYSRDDYRRDRGPPQRPKLNKPRSTPKEDDSAS
TSQSTRAASIFGGAAPVDTAAREREVEERLQKEQELQRQLDEPKLERRPRERHPSWRSEETQERERSRT
GSESSQTGTSTSSRNARRRESEKSLNETLNKEEDCHSPTSKPPKPDQPLKVMAPPKNAWVKRSSN
PPARSQSSDTEQQSPTSGGKVAQAPSEEGPGRKDENKVDGMNAPKQGTGNSSRGPDGGNRDHWKESD
RKDGKKDQDSRSAPPKPEENPASKFSSASKYAALSVDGEDENEGEDYAE

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001417

ORF Size: 1833 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001417.3](#), [NP_001408.2](#)

RefSeq Size: 3885 bp

RefSeq ORF: 1836 bp

Locus ID: 1975

UniProt ID: [P23588](#)

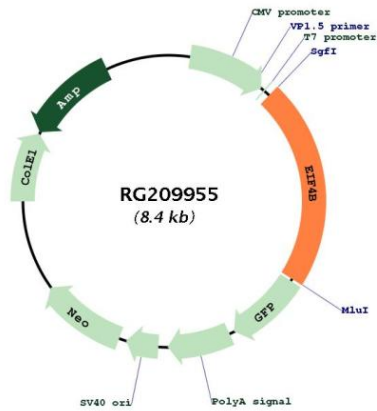
Cytogenetics: 12q13.13

Domains: RRM

Protein Pathways: mTOR signaling pathway

Gene Summary: Required for the binding of mRNA to ribosomes. Functions in close association with EIF4-F and EIF4-A. Binds near the 5'-terminal cap of mRNA in presence of EIF-4F and ATP. Promotes the ATPase activity and the ATP-dependent RNA unwinding activity of both EIF4-A and EIF4-F. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG209955