

Product datasheet for **RG202322**

eIF2B epsilon (EIF2B5) (NM_003907) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | eIF2B epsilon (EIF2B5) (NM_003907) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | eIF2B epsilon |
| Synonyms: | CACH; CLE; EIF-2B; EIF2Bepsilon; LVWM |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide
Sequence:

>RG202322 representing NM_003907
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGCCCTGTAGTGGCGCCCTGGTGTGGTGGTTAGTCGGGCTAACAAAGCGCAGCGCGCGGGC
CGGGAGGCAGCGGTGGCGGGGAGCCAGAGGGCGGAGGAGGAACCGCCCGCCCTACAAGCAGTTCT
GGTGGCCGATAGCTTCGATCGCCGCTTCTTCCCATCTCCAAGGACCAGCCTCGGGTCTCTTGCCCTG
GCCAATGTGGCATTAAATTGACTACACTCTGGAATTCCTGACTGCCACAGGTGTACAGGAAACATTTGTCT
TTTGTGCTGAAAGCTGCTCAAATCAAAGAACATTTACTGAAGTCAAAGTGGTGGCCCTACATCTCT
CAATGTGGTTCGAATAATTACATCAGAGCTCTATCGATCACTGGGAGATGTCTCCGTGATGTTGATGCC
AAGGCTTTGGTGCCTGACTTCTTCTGGTGTATGGGATGTCATCTCAAACATCAATATCACCAGAG
CCCTTGAGGAACACAGGTTGAGACGGAAGCTAGAAAAAATGTTTCTGTGATGACGATGATCTTCAAGGA
GTCATCCCCAGCCACCAACTCGTTGCCACGAAGACAATGTGGTGTAGTGGCTGTGGATAGTACCACAAC
AGGGTTCTCCATTTTCAGAAAGACCAGGGTCTCCGGCGTTTTGCATTTCCCTGAGCCTGTTTCAGGGCA
GTAGTGATGGAGTGGAGTTCGATATGATTTACTGGATTGTCATATCAGCATCTGTTCTCCCTCAGGTGGC
ACAACCTTTTACAGACAACCTTTGACTACCAAACCTCGAGATGACTTTGTGCGAGGTCTCTTAGTGAATGAG
GAGATCCTAGGGAACCAGATCCACATGCACGTAACAGCTAAGGAATATGGTGGCCGTGTCTCCAACCTAC
ACATGACTCAGCTGTCTGTGCTGACGTCATCCGCCGATGGGTCTACCCTCTCACCCAGAGGGCAACTT
CACTGACAGCACCCAGAGCTGCACTCATTCCCGGCACAACATCTACCGAGGGCCTGAGGTGAGCCTG
GGCCATGGCAGCATCCTAGAGGAAAATGTCTCCTGGGCTCTGGCACTGTCATTGGCAGCAATTGCTTTA
TCACCAACAGTGTCAATTGGCCCCGGCTGCCACATTGGTGATAACGTGGTGTGGACCAGACCTACCTGTG
GCAGGGTGTTCGAGTGGCGGCTGGAGCACAGATCCATCAGTCTCTGCTTTGTGACAATGCTGAGGTCAAG
GAACGAGTGACACTGAAACCACGCTCTGTCTCACTTCCAGGTGGTCTGGGCCAAATATCACGCTGC
CTGAGGGCTCGGTGATCTCTTTCACCCCTCCAGATGCAGAGGAAGATGAAGATGATGGCGAGTTCAGTGA
TGATTCTGGGGCTGACCAAGAAAAGGACAAAAGTGAAGATGAAAGGTTACAATCCAGCAGAAGTAGGAGCT
GCTGGCAAGGGCTACCTCTGAAAGCTGCAGGCATGAACATGGAGGAAGAGGAGGAACTGCAGCAGAATC
TGTGGGGACTCAAGATCAACATGGAAGAAGAGAGTGAAGTGAAGTGAAGTGAAGTATGGATTCTGAGGA
GCCGGACAGCCGGGGAGGCTCCCCTCAGATGGATGACATCAAAGTGTCCAGAATGAAGTTTTAGGAACA
CTACAGCGGGGCAAAGAGGAGAACATTTCTGTGACAATCTCGTCTGAAATCAACTCTCTCAAGTATG
CCTATAACGTAAGTCTAAAGGAGGTGATGCAGGTACTGAGCCACGTGGTCTGGAGTTCCCCTGCAACA
GATGGATTCCCCGCTTACTCAAGCCGCTACTGTGCCCTGCTGCTTCTCTGCTAAAGGCCCTGGAGCCCT
GTTTTTAGGAACTACATAAAGCGCGCAGCCGACCATTTGGAAGCGTTAGCAGCCATTGAGGACTTCTTCC
TAGAGCATGAAGCTTTGGTATTTCCATGGCCAAGGACTGATGGCTTTCTACCAGCTGGAGATCCTGGC
TGAGGAAACAATTCTGAGCTGGTTCAGCCAAAGAGATACAACGACAAGGGCCAGCAGTTGCGCAAGAA
CAACAGCTGCAGAGGTTCCATCCAGTGGCTAAAAGAGGCAGAAGAGGAGTCACTGAAGATGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG202322 representing NM_003907
 Red=Cloning site Green=Tags(s)

MAAPVVAPPVVVSRANKRSGAGPGGSGGGGARGAE E E P P P L Q A V L V A D S F D R R F F P I S K D Q P R V L L P L
 ANVALIDYTLLEFLTATGVQETFFVCCWAAQIKEHLLKSKWCRPTSLNVVRIITSEL YRSLGDVLRD V D A
 KALVRSDFLLVYGDVISNINITRALEEHLRRLKLEKNVSVMTMIFKESSPSHPTRCHEDNVVVAVDSTTN
 RVLHFQKTQGLRRFAFPLSLFQGS SDGVEVRYD L L D C H I S I C S P Q V A Q L F T D N F D Y Q T R D D F V R G L L V N E
 E I L G N Q I H M H V T A K E Y G A R V S N L H M Y S A V C A D V I R R W V Y P L T P E A N F T D S T T Q S C T H S R H N I Y R G P E V S L
 G H G S I L E E N V L L G S G T V I G S N C F I T N S V I G P G C H I G D N V V L D Q T Y L W Q G V R V A A G A Q I H Q S L L C D N A E V K
 E R V T L K P R S V L T S Q V V V G P N I T L P E G S V I S L H P P D A E E D E D D G E F S D D S G A D Q E K D K V K M K G Y N P A E V G A
 A G K G Y L W K A A G M N M E E E E L Q Q N L W G L K I N M E E E S E S E S E Q S M D S E E P D S R G G S P Q M D D I K V F Q N E V L G T
 L Q R G K E E N I S C D N L V L E I N S L K Y A Y N V S L K E V M Q V L S H V L E F P L Q Q M D S P L D S S R Y C A L L L P L L K A W S P
 V F R N Y I K R A A D H L E A L A A I E D F L E H E A L G I S M A K V L M A F Y Q L E I L A E T I L S W F S Q R D T T D K G Q Q L R K N
 Q Q L Q R F I Q W L K E A E E E S E D D

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003907

ORF Size: 2163 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_003907.1](#), [NP_003898.1](#)

RefSeq Size: 2898 bp

RefSeq ORF: 2166 bp

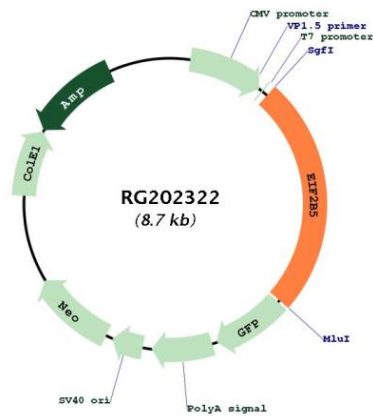
Locus ID: 8893

UniProt ID: [Q13144](#)

Cytogenetics: 3q27.1

Gene Summary: This gene encodes one of five subunits of eukaryotic translation initiation factor 2B (EIF2B), a GTP exchange factor for eukaryotic initiation factor 2 and an essential regulator for protein synthesis. Mutations in this gene and the genes encoding other EIF2B subunits have been associated with leukoencephalopathy with vanishing white matter. [provided by RefSeq, Nov 2009]

Product images:



Circular map for RG202322