

Product datasheet for **SC108577**

EIF2B1 (NM_001414) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EIF2B1 (NM_001414) Human Untagged Clone
Tag:	Tag Free
Symbol:	EIF2B1
Synonyms:	EIF2B; EIF2BA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108577 sequence for NM_001414 edited (data generated by NextGen Sequencing)

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ATGGACGACAAGGAGTTAATTGAATACTTTAAGTCTCAGATGAAAGAAGATCCTGACATG
GCCTCAGCAGTGGCTGCCATCCGGACGTTGCTGGAGTTCTTGAAGAGAGATAAAGGGGAG
ACAATCCAGGGTCTGAGGGCGAATCTCACCAAGTGCATAGAAACCCTGTGTGGTGTGGAC
TCCTCTGTGGCAGTGTCTCTGGCGGGGAGCTTCTCCTCCGCTTCATCAGTCTTGCCTCC
CTGGAATACTCCGATTACTCCAATGTAAAAAGATCATGATTGAGCGGGGAGAACTTTTT
CTCAGGAGAATATCACTGTCAAGAAACAAAATTGCAGATCTGTGCCATACTTTCATCAA
GATGGAGCGACAATATTGACTCACGCCTACTCCAGAGTGGTCTGAGAGTCTGGAAGCA
GCCGTGGCGCCAAGAAGCGATTTAGTGTATACGTCACAGAGTACAGCCTGATTTGTCA
GGTAAGAAAATGGCCAAAGCCCTCTGCCACCTCAACGTCTCTGTCACTGTGGTGTAGAT
GCTGCTGTGCGGTACATCATGGAGAAAGCAGATCTTGTATAGTTGGTGTGAAGGAGTT
GTTGAAAACGGAGGAATTATTAACAAGATTGGAACCAACCAGATGGCTGTGTGTGCCAAA
GCACAGAACAAACCTTTCTATGTGGTTGCAGAAAGTTTCAAGTTTGTCCGGCTCTTTCCA
CTAAACCAGCAAGACGTCCCAGATAAGTTTAAAGTATAAGGCAGACACTCTCAAGTCCGG
CAGACTGGACAAGACCTCAAAGAGGAGCATCCGTGGGTCGACTACACTGCCCTTCTCTTA
ATCACTCTGCTGTTTACAGACCTGGGCGTGTGACACCCTCAGCAGTCAGCGATGAGCTC
ATCAAGCTCTATCTGTAA
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Clone variation with respect to NM_001414.3
520 c=>t;590 c=>t



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001414 unedited
 TAGAGTCGAAATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACNNGGGGGTGC
 GGAGGTGTGCAGCGCGCTGTCAGACTGGCTCGCAGGCGGGCGGGCCGGGACCCGTTTCG
 AGACAGCGGGCGGCTCGGGTCCCCTGGGGCTCCGCAGCAGGAGGACGCCATGGACGAC
 AAGGAGTTAATTGAATACTTTAAGTCTCAGATGAAAGAAGATCCTGACATGGCCTCAGCA
 GTGGCTGCCATCCGGACGTTGCTGGAGTTCTTGAAGAGAGATAAAGGGGAGACAATCCAG
 GGTCTGAGGGCGAATCTCACCAGTGCCATAGAAACCCTGTGGTGGTGGACTCCTCTGTG
 GCAGTGTCTCTGGCGGGAGCTCTTCCCTCCGCTTCATCAGTCTTGCCTCCCTGGAATAC
 TCCGATTACTCCAAATGTAAAAAGATCATGATTGAGCGGGGAGAAGCTTTTCTCAGGAGA
 ATATCACTGTCAAGAAACAAAATTGCAGATCTGTGCCATACTTTCATCAAAGATGGAGCG
 ACAATATTGACTCAGCCTACTCCAGAGTGGTCTGAGAGTCTGGGAGCAGCCGTGGCG
 GCCAAGAAGCGATTTAGTGTATACGTACAGAGTACAGCCTGATTTGTCAGGTAAGAAA
 AATGCCAAAGCCCTCTGCCACCTCAACGTCTGTCACTGTGGTGTAGATGCTGCTGTC
 GGCTACATCATGGAGAAAGCAGATCTTGTATAGTTGGTGTGAAGGAGTTGTTGAAAAA
 CGAGGAATTATTAANCAGATTGGACCCACAGATGGCTGTGTGCCAAAGCACAGAACA
 AACCTTCTATGTGGTTGCAGAAAGTTTAAAGTTTGTCCGGTCTTTTACTAAACCAGC
 AGGACGTCCCAGATAAAATTAAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001414 unedited
 AACTTCCAGGGCAGNAAGGCACTGGGGAGGGTACAGGATGCCACCCGGGATCTGTTC
 AGGAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGTG
 TTTTCATAGAGTTTATTTGAAAAGATGCTGAATTTATTCCCAAGTATAATTTTAAAAAGCT
 GTTTAGGACCCAAACATATTTAAACATCTTTACACATACAGAATTTTCAAGTTTACAATA
 TTCCAGAAGGCATTTTCTTAAGCAGTGAACCATGCAGAATACTGTTGCTAAACATCGTTT
 CTGCCTTCTCTGTTCTCTTGGTAGTTTTTACTGTTTGGCTTGATCCTGCTGAGGAATG
 TGCTTACCACTGGAAGCCAGACGAGATTCGGCAAGTGTTCCTTGCCTCTTACAAGGCAC
 CGCGTGTAAACGTCCTGACCAGCTGTTGGTCTTGTGGCAGAGGGGATGGCTGCTTTTC
 GCCTGCATCTTGGTGTCTTAGGCAGATCAGTCTGGAGTGCAGGGGAGGATGAAGACAGG
 TGGACTTGGGCTCATCTTTCATCAGTTAAGTAGCCAATTATCTAACTTGTATTTCTGGAA
 ACTGAAAAGAAAAGTTTCTAGAAAACCGTAAGAAAATTTAAGTTGGGATTTAGAATAGCTGA
 CACATTTTATAGTGGGACTGAAATGAGTAAAAAAGTTTCCAGATGTATGATTNTAAGT
 CCTTACTCCATAAATCTTCATTAACACATCTCAGTTTTTGGCCTGACTACTGGGGGTGTC
 AAGCAGTACTACCCCTGCCTNCACTACGTAAGCTGCACCTGGCAGGAAAGGCTTACAGN
 TAAGATAGAGCTTGATGACTATCCTGATGCTTGGGTGTANACGCCAGTCTGTACAGCA
 AGTGATTAGAAAGGGCCAGGTATCACCACGAGCTTTTTTTGGGGTTGCTACTGCGACT
 TTGAAAGGGTGTATA

Restriction Sites:

NotI-NotI

ACCN:

NM_001414

Insert Size:

1650 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_001414.1](#), [NP_001405.1](#)

RefSeq Size: 1658 bp

RefSeq ORF: 918 bp

Locus ID: 1967

UniProt ID: [Q14232](#)

Cytogenetics: 12q24.31

Domains: IF-2B

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, Oct 2009]