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Product datasheet for RC223570

EIF2B3 (NM_020365) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EIF2B3 (NM_020365) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EIF2B3
Synonyms:	EIF-2B; EIF2Bgamma
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC223570 representing NM_020365
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAATTTCAAGCAGTAGTGATGGCAGTAGGTGGAGGATCTCGGATGACAGACCTAACTTCCAGCATTC
CCAAACCTCTGCTTCCAGTTGGGAACAAACCTTTAATTTGGTACCCATTGAACCTGCTTGAGCGTGTTGG
ATTTGAAGAAGTCATTGTGGTTACAACCAGGGATGTTCAAAAGGCTCTATGTGCAGAATTCAAGATGAAA
ATGAAGCCAGATATTGTGTGTATTCCTGATGACGCTGACATGGGAACTGCAGATTCTTTGCGCTACATAT
ATCCAAAACTTAAGACAGATGTGCTGGTGCTGAGCTGTGATCTGATAACAGACGTTGCCTTACATGAGGT
TGTGGACCTGTTTAGAGCTTATGATGCATCACTTGCTATGTTGATGAGAAAAGGCCAAGATAGCATAGAA
CCTGTTCCCGGTCAAAAGGGGAAAAAAAAAGCAGTGGAGCAGCGTGACTTCATTGGAGTGGACAGCACAG
GAAAGAGGCTGCTCTTCATGGCTAATGAAGCAGACTTGGATGAAGAGCTGGTCATTAAGGGATCCATCCT
ACAGAAGCATCCTAGAATACGTTTCCACACGGGTCTTGTGGATGCCCACCTCTACTGTTTGAAAAAATAC
ATCGTGGATTTCCTAATGGAAAATGGGTCAATAACTTCTATCCGGAGTGAACTGATTCCATATTTAGTGA
GAAAACAGTTTTCCTCAGCTTCCTCACAACAGGGACAAGAAGAAAAAGAGGAGGATCTAAAGAAAAAGGA
GCTGAAGTCCTTAGATATCTACAGTTTTATAAAAGAAGCCAATACACTGAACCTGGCTCCCTATGATGCC
TGCTGGAATGCCTGTCGAGGAGACAGGTGGGAAGACTTGTCCAGATCACAGGTGCGCTGCTATGTCCACA
TCATGAAAGAGGGGCTCTGCTCTCGAGTGAGCACACTGGGACTCTACATGGAAGCAAACAGACAGGTGCC
CAAATTGCTGTCTGCTCTCTGTCCAGAAGAACCACCAGTCCATTCGTCAGCCCAGATTGTCAGCAAACAC
CTGGTTGGAGTTGACAGCCTCATTGGGCCAGAGACACAGATTGGAGAGAAGTCATCCATTAAGCGCTCAG
TCATTGGCTCATCCTGTCTCATAAAAGATAGAGTGACTATTACCAATTGCCTTCTCATGAACTCAGTCAC
TGTGGAGGAAGGAAGCAATATCCAAGGCAGTGTCATCTGCAACAATGCTGTGATCGAGAAGGGTGCAGAC
ATCAAGGACTGCTTGATTGGAAGTGGCCAGAGGATTGAAGCCAAAGCTAAACGAGTGAATGAGGTGATCG
TGGGGAATGACCAGCTCATGGAGATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

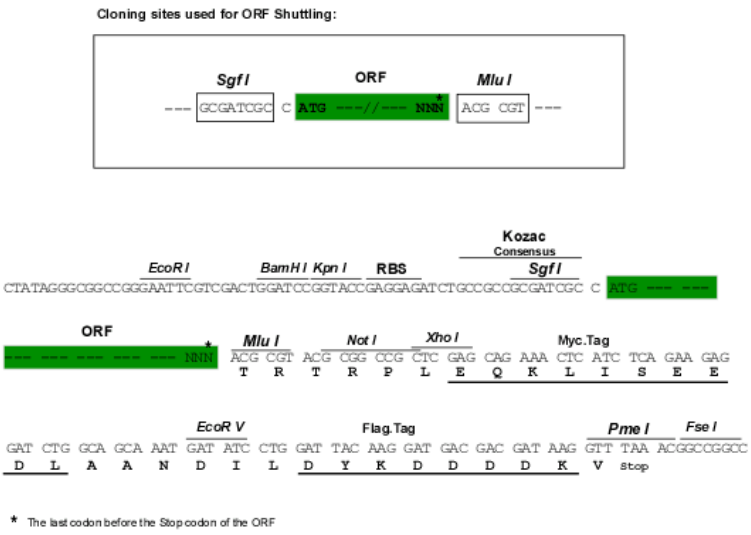
>RC223570 representing NM_020365
Red=Cloning site Green=Tags(s)

MEFQAVVMAVGGGSRMTDLTSSIPKPLLPVGNKPLIWYPLNLLERVGFEEVIVVTTRDVQKALCAEFKMK
MKPDIVCIPDDADMGTADSLRYIYPKLKTDVLVLSCDLITDVALHEVVDLFRAYDASLAMLMRKGQDSIE
PVPGQKGKKKAVEQRDFIGVDSTGKRLLFMANEADLDEELVIKGSILQKHPRIRFHTGLVDAHLYCLKKY
IVDFLMENGSITSIRSELIPYLVRKQFSSASSQQGQEEKEEDLKKKELKSLDIYSFIKEANTLNLAPYDA
CWNACRGDRWEDLSRSQVRCYVHIMKEGLCSRVSTLGLYMEANRQVPKLLSALCPEEPPVHSSAQIVSKH
LVGVDSLIGPETQIGEKSSIKRSVIGSSCLIKDRVTITNCLLMNSVTVEEGSNIQGSVICNNAVIEKGAD
IKDCLIGSGQRIEAKAKRVNEVIVGNDQLMEI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020365

ORF Size: 1356 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_020365.5

RefSeq Size: 1602 bp

RefSeq ORF: 1359 bp

Locus ID: 8891

UniProt ID: Q9NR50

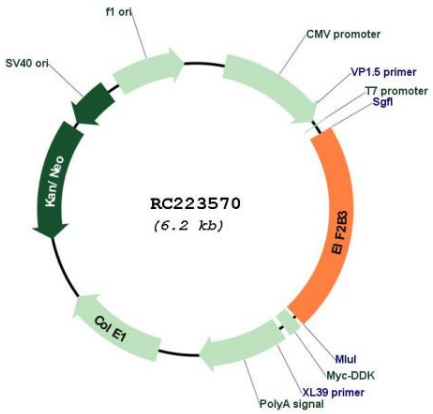
Cytogenetics: 1p34.1

Domains: NTP_transferase

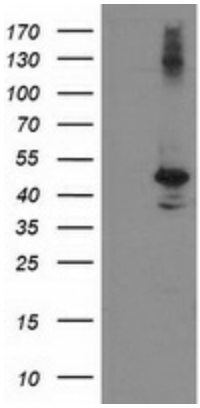
MW: 50.1 kDa

Gene Summary: The protein encoded by this gene is one of the subunits of initiation factor eIF2B, which catalyzes the exchange of eukaryotic initiation factor 2-bound GDP for GTP. It has also been found to function as a cofactor of hepatitis C virus internal ribosome entry site-mediated translation. Mutations in this gene have been associated with leukodystrophy with vanishing white matter. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

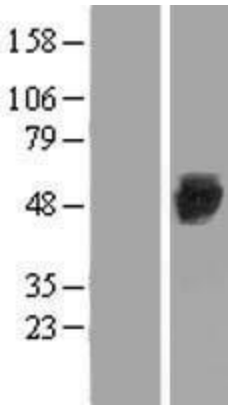
Product images:



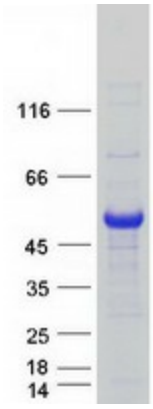
Circular map for RC223570



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EIF2B3 (Cat# RC223570, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EIF2B3(Cat# [TA503758]). Positive lysates [LY412535] (100ug) and [LC412535] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412535]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223570 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EIF2B3 protein (Cat# [TP323570]). The protein was produced from HEK293T cells transfected with EIF2B3 cDNA clone (Cat# RC223570) using MegaTran 2.0 (Cat# [TT210002]).