

Product datasheet for **RC201563**

EIF2S2 (NM_003908) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EIF2S2 (NM_003908) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EIF2S2
Synonyms:	eIF-2-beta; EIF2; EIF2B; EIF2beta; PPP1R67
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201563 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCTGGGGACGAGATGATTTTTGATCCTACTATGAGCAAGAAGAAAAAGAAGAAGAAGCCTTTTA
TGTTAGATGAGGAAGGGGATACCCAAACAGAGGAAACCCAGCCTTCAGAAACAAAAGAAGTGGAGCCAGA
GCCAACTGAGGACAAGGATTTGGAAGCTGATGAAGAGGACACTAGGAAAAAGATGCTTCTGATGATCTA
GATGACTTGAACCTCTTTAATCAAAGAAAAAGAAGAAAAAACTAAAAAGATATTTGATATTGATGAAG
CTGAAGAAGGTGTAAGGATCTTAAGATTGAAAGTGATGTTCAAGAACCAACTGAACCAGAGGATGACCT
TGACATTATGCTTGGCAATAAAAAGAAGAAAAAGAAGATGTTAAGTTCCAGATGAGGATGAAATACTA
GAGAAAGATGAAGCTCTAGAAGATGAAGACAACAAAAAGATGATGGTATCTCATTTCAGTAAATCAGACAG
GCCCTGCTTGGCAGGCTCAGAAAGAGACTACACATACGATGAGCTGCTGAATCGAGTGTCAACATCAT
GAGGGAAAAGAAATCCAGATATGGTTGCTGGGGAGAAAAGGAAATTTGTCATGAAACCTCCACAAGTCGTC
CGAGTAGGAACCAAGAAAACCTCTTTTGTCAACTTTACAGATATCTGTAAACTATTACATCGTCAGCCCA
AACATCTCCTTGCATTTTTGTTGGCTGAATTGGGTACAAGTGGTCTATAGATGGTAATAACCAACTTGT
AATCAAAGGAAGATCCAACAGAAACAGATAGAAAATGTCTTGAGAAGATATATCAAGGAATATGTCACT
TGTCACACATGCCGATCACCGACACAATCCTGCAGAAGGACACAGACTCTATTTCTACAGTGCGAAA
CTTGTCATTCTAGATGTTCTGTTGCCAGTATCAAACCCGGCTTCCAGGCTGTACGGGCAAGCGAGCACA
GCTCCGTGCCAAAGCTAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201563 protein sequence
Red=Cloning site Green=Tags(s)

MSGDEMIFDPTMSKKKKKKKPFMLDEEGDTQTEETQPSETKEVEPEPTEDKDLEADEEDTRKKDASDDL
 DDLNFFNQKKKKKKTKKIFDIDEAEEGVKDLKIESDVQEPTPEDDLDIMLGNKKKKKNVKFPDEDEIL
 EKDEALEDEDNKKDDGISFSNQTPAWAGSERDYTYDELLNRVFNIMREKNPMDVAGEKRKFVMKPPQVV
 RVGTKKTSFVNFDTICKLLHRQPKHLLAFLLAELGTSGSIDGNNQLVIKGRFQQKQIENVLRRYIKEYVT
 CHTCRSPDTILQKDTRLVFLQCETCHSRCSVASIKTGFQAVTGKRAQLRAKAN

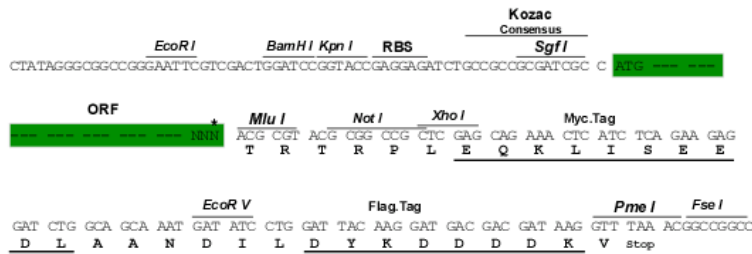
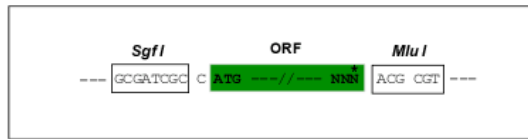
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6038_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_003908

ORF Size: 999 bp

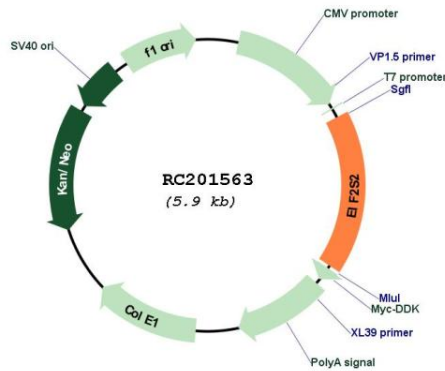
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

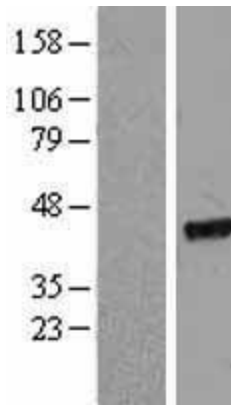
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_003908.5
RefSeq Size:	2592 bp
RefSeq ORF:	1002 bp
Locus ID:	8894
UniProt ID:	P20042
Cytogenetics:	20q11.22
Domains:	eIF2B_5
MW:	38.4 kDa
Gene Summary:	<p>Eukaryotic translation initiation factor 2 (EIF-2) functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA and binding to a 40S ribosomal subunit. EIF-2 is composed of three subunits, alpha, beta, and gamma, with the protein encoded by this gene representing the beta subunit. The beta subunit catalyzes the exchange of GDP for GTP, which recycles the EIF-2 complex for another round of initiation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]</p>

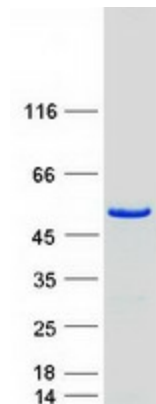
Product images:



Circular map for RC201563



Western blot validation of overexpression lysate (Cat# [LY401290]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201563 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EIF2S2 protein (Cat# [TP301563]). The protein was produced from HEK293T cells transfected with EIF2S2 cDNA clone (Cat# RC201563) using MegaTran 2.0 (Cat# [TT210002]).