

Product datasheet for **RC222762**

SF3B2 (NM_006842) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SF3B2 (NM_006842) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SF3B2
Synonyms:	Cus1; SAP145; SF3b1; SF3B145; SF3b150
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC222762 representing NM_006842
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGACGGAGCATCCCAGCCTCCCAAAGCAGAATTGCAGCTGCCGCCGCCACCTCCAGGCCACT
 ATGGCGCCTGGGCTGCCAGGAGCTTCAGGCCAAGTTGGCAGAGATCGGAGCTCCGATCCAGGGTAAATCG
 CGAGGAGCTGGTGGAGCGCTGCAGAGCTACACCCGCCAGACTGGCATCGTGCTGAATCGGCCGTTTTG
 AGAGGGGAAGATGGGGACAAAGCCGCTCCACCTCCCATGTCCGCACAGCTCCCTGGAATCCCATGCCAC
 CACCACCTTTGGGACTCCCCCTCTGCAGCCTCCTCCGCCACCCACCACCTCCACCAGGCCTTGGCCT
 TGGCTTTCCTATGGCCACCCACCAATTTGGGGCCCCGCTCCTCCTCGTGTGGGTGAGCCAGTGGA
 CTGTCAGAGGAGGAGCGGTGAAGTTGGCTCAGCAGCAGGCGCATTGCTGATGCAGCAGGAGGAGCGTG
 CCAAGCAGCAGGGAGATCATTGCTGAAGGAACATGAGCTCTTGGAGCAGCAGAAGCGGGCAGCTGTGT
 ACTGGAGCAGGAACGACAGCAGGAGATTGCCAAGATGGGCACCCAGTCCCTCGGCCCCACAAGACATG
 GCCAGATTGGTGTGCGCACTCCTCTGGGTCTCGAGTAGCTGCTCCAGTGGGCCAGTGGGCCCCACTC
 CTACAGTTTTGCCATGGGAGCCCTGTTCCCGGCTCGTGGTCCCCACCGCCCCCTGGAGATGAGAA
 CAGAGAGATGGATGACCCTCTGTGGGCCCAAGATCCCCAGGCTTTGGAGAAGATCCTGCAGCTGAAG
 GAGAGCCGCCAGGAAGAGATGAATTCAGCAGGAGGAAGAGGAAATGGAAACAGATGCTCGCTCGTCCC
 TGGGCCAGTCAGCGTCAGAGACTGAGGAGGACACAGTGTCCGTATCTAAAAAGGAGAAAAACCGGAAGCG
 TAGGAACCGAAAGAAGAAGAAAAAGCCCCAGCGGGTGCAGGGGTGTCTCTGAGAGCTCTGGGGACCGG
 GAGAAAGACTCAACCCGGTCCCCTGGCTCTGATCCCCAGCAGCTGATGTTGAGATTGAGTATGTGACTG
 AAGAACCTGAAATTTACGAGCCCACTTATCTTCTTTAAGAGGATCTTTGAGGCTTTTAAAGCTCACTGA
 TGATGTGAAGAAGGAGAAGAGAAGGAGGCCAGAGAACTTGACAACTGGAGAACTCTGCAGCCCCAAG
 AAGAAGGGATTTGAAGAGGAGCAAGGACAGTATGATGACAGCAGTATGACGAGCAGGAAAAGAAGC
 CAGAAGCCCCAAGCTGTCCAAGAAGAAGTTGCGCCGAATGAACCGCTTCACTGTGGCTGAACTCAAGCA
 GCTGGTGGCTCGGCCGATGTCGTGGAGATGCACGATGTGACAGCGCAGGACCCTAAGCTCTTGGTTAC
 CTCAAGGCCACTCGAACTCTGTGCTGTGCCACGCCACTGGTGTTTAAGCGCAAATACCTGCAGGGCA
 AACGGGGCATTGAGAAGCCCCCTTCGAGCTGCCAGACTTCATCAAACGCACAGGCATCCAGGAGATGCG
 AGAGGCCCTGCAGGAGAAGGAAGAACAGAAGACCATGAAGTCAAAAATGCGAGAGAAAGTTCCGCCAAG
 ATGGGCAAAATTGACATCGACTACCAGAACTGCATGATGCCTTCTTCAAGTGGCAGACCAAGCCAAAGC
 TGACCATCCATGGGGACCTGACTATGAGGGGAAGGAGTTCGAGACACGACTGAAGGAGAAGAAGCCAGG
 AGATCTGTCTGATGAGCTAAGGATTTCTTGGGGATGCCAGTAGGACCAAATGCCACAAGTCCCTCCC
 CCATGGCTGATTGCCATGCAGCGATATGGACCACCCCATCGTATCCCAACCTGAAAATCCCTGGGCTGA
 ACTCGCCCATCCCTGAGAGCTGTTCTTTGGGTACCATGCTGGTGGCTGGGGCAAACCTCCAGTGGATGA
 GACTGGGAAACCGCTCTATGGGGACGTGTTTGGAAACCAATGCTGCTGAATTTAGACCAAGACTGAGGAA
 GAAGAGATTGATCGGACCCCTTGGGGGAACTGGAACCATCTGATGAAGAATCCTCAGAAGAAGAGGAAG
 AGGAAGAAAGTGAAGACAAACCAGATGAGACAGGCTTTATTACCCCTGCAGACAGTGGCCTTATCAC
 TCCTGGAGGCTTTTCATCAGTGCCTGCTGGAATGGAGACCCCTGAACTCATTGAGCTGAGGAAGAAGAAG
 ATTGAGGAGGCGATGGACGGAAGTGAACACCTCAGCTCTTCACTGTGTTGCCAGAGAAGAGAACAGCCA
 CTGTTGGAGGGCCATGATGGGATCAACCACATTTATGACATGTCCACGGTTATGAGCCGGAAGGGCCC
 GGCTCCTGAGCTGCAAGGTGTGGAAGTGGCGCTGGCGCCTGAAGAGTTGGAGCTGGATCCTATGGCCATG
 ACCCAGAAGTATGAGGAGCATGTGCGGGAGCAGCAGGCTCAAGTAGAGAAGGAGGACTTCAGTGACATGG
 TGGCTGAGCACGCTGCCAAACAGAAGCAAAAAAAGCGAAAGCTCAGCCCAGGACAGCCGTGGGGGCGAG
 CAAGAAATATAAGGAGTTCAAGTTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222762 representing NM_006842
 Red=Cloning site Green=Tags(s)

MATEHPEPPKAEQLPPPPPPGHYGAWAAQELQAKLAEIGAPIQGNREELVERLQSYTRQTGIVLNRPVL
 RGEDGDKAAPPPMSAQLPGIPMPPLGLPPLQPPPPPPPPPGLGLGFPMAHPPNLGPPPPLRVGEPVA
 LSEEERLKLAAQQAALLMQQEERAKQQGDHSLKEHELLEQQKRAAVLLEQERQQEIAKMGTPVPRPQDM
 GQIGVRTPLGPRVAAPVGPVGPPTVLMGAPVPRPRGPPPPPGDENREMDPPSVGPKIPQALEKILQLK
 ESRQEEMNSQQEEEEEMTDARSSLGQSASETTEEDTVSVSKKEKNRKRRNRKKKKKPKQVRVGVSSSGDR
 EKDSTRSRGSDSPAADVEIEYVTEEPEIYEPNFIFFKRIFEAFKLTDDVKKEKEKEPEKLDKLENSAAPK
 KKGFEHHKSDSSDDEQEKKPEAPKLSKKLRRMRFTVAELKQLVARPDVEMHDVTAQDPKLLVH
 LKATRNSVPVPRHWCfKRKYLQGKRGIEKPPFELPDFIKRTGIQEMREALQEKEEQTKMKSkmREKVRPK
 MGKIDIDYQKLDHDAFFKWQTKPKLTIHGDLYEGKEFETRLKEKPGDLSDELRLSLGMPVGNNAHKVPP
 PWLIAMQRYGPPPSYPNLKIPGLNSPIPESCSFGYHAGGWGKPPVDETGKPLYGDVFGTNAAEFQTKTEE
 EEDRTPWGELEPSDEESSEEEEEESDEDKPDETGFITPADSGLITPGGFSVPAOMETPELIELRKKK
 IEEAMDGSETPQLFTVLEKRTATVGGAMMGSTHIYDMSTMVRKGPAPQLQVEVALAPEELELDPMM
 TQKYEEHVREQAQVEKEDFSDMVAEHAAKQKQKKRAQPQDSRGGSKYKEFKF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8119_h02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

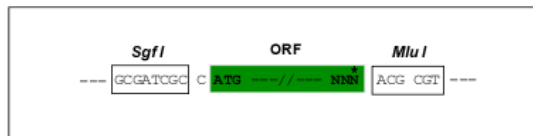


Diagram illustrating various cloning sites and their corresponding amino acid sequences:

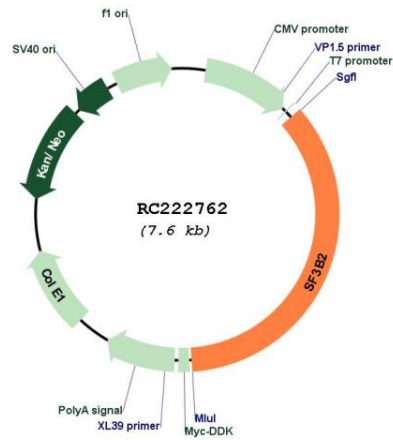
EcoRI (CTATAGGCGCGCCGGGAATTC) GTCTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C **ORF** (A TG NNN)
 BamHI Kpn I RBS Kozac Consensus SgfI
 Mlu I Not I Xho I Myc.Tag
 ACG CGT ACG CCG CCG CTC GAG CAG AAA CTC ATC TCA GAA GAG
 T R T R P L E Q K L I S E E
 EcoR V Flag.Tag Pme I Fse I
 GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAG GAT AAG GTT TAA ACGGCCGGCC
 D L A A N D I L D Y K D D D D K V Stop

* The last codon before the Stop codon of the ORF

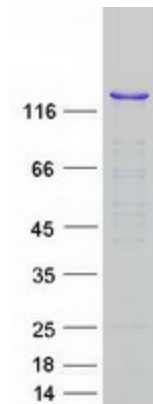
ACCN: NM_006842

ORF Size:	2685 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.
RefSeq:	NM_006842.3
RefSeq Size:	2902 bp
RefSeq ORF:	2688 bp
Locus ID:	10992
UniProt ID:	Q13435
Cytogenetics:	11q13.1
Domains:	SAP, PSP, DUF382
Protein Pathways:	Spliceosome
MW:	100.7 kDa
Gene Summary:	This gene encodes subunit 2 of the splicing factor 3b protein complex. Splicing factor 3b, together with splicing factor 3a and a 12S RNA unit, forms the U2 small nuclear ribonucleoproteins complex (U2 snRNP). The splicing factor 3b/3a complex binds pre-mRNA upstream of the intron's branch site in a sequence-independent manner and may anchor the U2 snRNP to the pre-mRNA. Splicing factor 3b is also a component of the minor U12-type spliceosome. Subunit 2 associates with pre-mRNA upstream of the branch site at the anchoring site. Subunit 2 also interacts directly with subunit 4 of the splicing factor 3b complex. Subunit 2 is a highly hydrophilic protein with a proline-rich N-terminus and a glutamate-rich stretch in the C-terminus. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC222762



Coomassie blue staining of purified SF3B2 protein (Cat# [TP322762]). The protein was produced from HEK293T cells transfected with SF3B2 cDNA clone (Cat# RC222762) using MegaTran 2.0 (Cat# [TT210002]).