

Product datasheet for **RC201098**

SF3A1 (NM_005877) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SF3A1 (NM_005877) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SF3A1
Synonyms:	PRP21; PRPF21; SAP114; SF3A120
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC201098 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCGGCCGGACCCGTGCAGGCGGTGCCCCGCCGCCCGCCGTGCCACGGAGCCAAACAGCCCACAG
 AAGAAGAAGCATCTTCAAAGGAGGATTCTGCACCTTCTAAGCCAGTTGTGGGGATTATTTACCCTCCTCC
 AGAGGTACAGAAATATTGTTGACAAGACTGCCAGCTTTGTGGCCAGAAAACGGGCTGAATTTGAAGCTAGG
 ATCCGACAGAACGAGATCAACAACCCCAAGTTCAACTTTCTGAACCCCAATGACCCTTACCATGCCTACT
 ACCGCCACAAGGTCAGCGAGTTCAAGGAAGGGAAGGCTCAGGAGCCGTCCGCCGCATCCCCAAGGTCAT
 GCAGCAGCAGCAGACCACCCAGCAGCAGCTGCCCCAGAAGGTCCAAGCCCAAGTAATCCAAGAGACC
 ATCGTGCCCAAAGAGCCTCCTCCTGAGTTTGAGTTCATTGCTGATCCTCCTCTATCTCAGCCTTCGACT
 TGGATGTGGTGAAGCTGACGGCTCAGTTTGTGGCCAGGAATGGGCGCCAGTTTCTGACCCAGCTGATGCA
 GAAAGAGCAGCGCAACTACCAGTTTGACTTTCTCCGCCACAGCAGCCTCTTCAACTACTTCAGGAAG
 CTAGTGGAACAGTACACCAAGATCTTGATTCCACCCAAAGGTTTATTTTCAAAGCTCAAGAAAGAGGCTG
 AAAACCCCGAGAAGTTTGGATCAGGTGTGTTACCGAGTGGAATGGGCCAAATTCAGGAACGTGAGAG
 GAAGAAGGAAGAAGGAGAAGGAGAAGGAGCGGGTGGCCTATGCTCAGATCGACTGGCATGATTTTGTG
 GTGGTGGAAACAGTGGACTTCCAACCCAATGAGCAAGGGAACCTCCCTCCCCCACCACGCCAGAGGAGC
 TGGGGGCCGAATCCTCATTGAGGAGCGCTATGAAAAGTTGGGGAGAGTGAGGAAGTTGAGATGGAGGT
 CGAGTCTGATGAGGAGGTGACAAACAGGAGAAGGCGGAGGAGCCTCCTCCCAGCTGGACCAGGACACC
 CAAGTACAAGATATGGATGAGGGTTCAGATGATGAAGAAGAAGGGCAGAAAGTCCCCCACCACCCAGAGA
 CACCCATGCCCTCCACCTCTGCCCCCACTCCAGACCAAGTCATTGTCCGCAAGGATTATGATCCCAAAGC
 CTCCAAGCCCTTGCCCTCCAGCCCTGCTCCAGATGAGTATCTTGTGTCCCCATTACTGGGAGAAAGATC
 CCCGCCAGCAAAATGCAGGAACACATGCGCATTGGACTTCTTGACCTCGCTGGCTGGAGCAGCGGGATC
 GCTCCATCCGTGAGAAGCAGAGCGATGATGAGGTGTACGCACCAGGTCTGGATATTGAGAGCAGCTTGAA
 GCAGTTGGCTGAGCGGCTACTGACATCTTCGGTGTAGAGGAAACAGCCATTGGTAAGAAGATCGGTGAG
 GAGGAGATCCAGAAGCCAGAGGAAAAGGTGACCTGGGATGGCCACTCAGGCAGCATGGCCCGGACCCAGC
 AGGCTGCCAGGCCAACATCACCTCCAGGAGCAGATTGAGGCCATTACAAGGCCAAAGGCCTGGTGCC
 AGAGGATGACACTAAAGAGAAGATTGGCCCCAGCAAGCCCAATGAAATCCCTCAACAGCCACCGCCACCA
 TCTTCAGCCACCAACATCCCAGCTCGGCTCCACCCATCACTTCAGTGCCCGGACCCACCAATGCCAC
 CTCCAGTTTCGTACTACAGTTGTCTCCGAGTACCCGTGATGCCCGGCCCCCAATGGCATCTGTGGTCCG
 GCTGCCCCAGGCTCAGTGATCGCCCCATGCCGCCATCATCCACGCGCCAGAAATCAACGTGGTGCC
 ATGCCCTCCCTCGGCCCTCCTATTATGGCCCCCGCCACCCCCATGATTGTGCCAACAGCCTTTGTGC
 CTGCTCCACCTGTGGCACCTGTCCCAGCTCCAGCCCAATGCCCCCTGTGCATCCCCACCTCCCATGGA
 AGATGAGCCACCTCAAAAACTGAAGACAGAGGACAGCCTCATGCCAGAGGAGGATTCCTGCGCAGA
 AACAAGGGTCCAGTGTCCATCAAAGTCCAGGTGCCCAACATGCAGGATAAGACGGAAATGGAACCTGAATG
 GGCAGGTGCTGGTCTTCAACCTCCACTCACGGACCAGGTCTCTGTATTAAAGTGAAGATTATGAAGC
 CACAGGCATGCCTGCAGGAAACAGAAGCTACAGTATGAGGGTATCTTCATCAAAGATTCCAACCTACTG
 GCTTACTACAACATGGCCAATGGCGCAGTCATCCACCTGGCCCTCAAGGAGAGAGCGGGGAGGAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201098 protein sequence
Red=Cloning site Green=Tags(s)

MPAGPVQAVPPPPVPTEPKQPTTEEEASSKEDSAPSKPVVGGIYPPPEVRNIVDKTASFVARNGPEFEAR
IRQNEINNPKFNFLNPNDPYHAYYRHKVSEFKEGKAQEPSAAIPKVMQQQQTTQQQLPQKVQAQVIQET
IVPKEPPPEFEFIADPPSISAFDLDVVKLTAQFVARNGRQFLTQLMQKEQRNYQDFLRPQHSLFNYFTK
LVEQYTKILIPPKGLFSKLLKKEAENPREVLDQVCYRVWAKFQERERKKEEEEEKEKERVAYAQIDWHDFV
VVETVDFQPNQGNFPPPTTPEELGARILIQERYEKFGESEEVEMEVESDEEDDKQEAEPPSQLDQDT
QVQDMDEGSDEEEGQKVPPEETPMPPPLPPTPDQVIVRKDYDPKASKPLPPAPAPDEYLVSPITGEKI
PASKMQEHMRIGLLDPRWLEQRDRSIREKQSDDEVYAPGLDIESSLKQLAERRTDIFGVEETAIGKKIGE
EEIQKPEEKVTDGHSGSMARTQQAQANITLQEIEAIIHKAKGLVPEDDTKEKIGPSKPNEIPQQPPPP
SSATNIPSSAPPITSVPRPPTMPPPVRTTVVSAVPMRPPMASVVRLPPGSVIAPMPPIIHAPRINVVP
MPPSAPPIMAPRPPPMIVPTAFVPAPPVAPVAPAPMPPVHPPPPMEDEPTSKKLTEDSLMPEEEFLRR
NKGVPVSIKQVPMQDKTEWKLNGQVLVFTLPLTDQVSVIKVKIHEATGMPAGKQKLQYEGIFIKDSNSL
AYYNMANGAVIHLALKERGGRRK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6261_a05.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_005877

ORF Size: 2379 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_005877.6](#)

RefSeq Size: 5159 bp

RefSeq ORF: 2382 bp

Locus ID: 10291

UniProt ID: [Q15459](#)

Cytogenetics: 22q12.2

Domains: Surp, UBQ

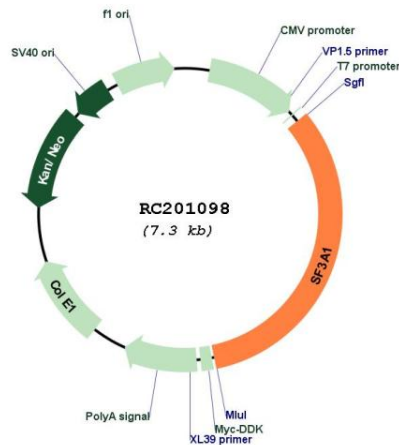
Protein Families: Druggable Genome

Protein Pathways: Spliceosome

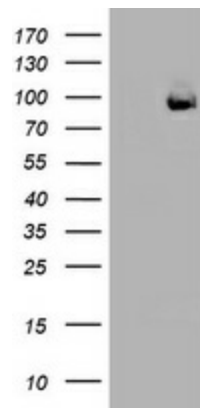
MW: 88.9 kDa

Gene Summary: This gene encodes a subunit of the splicing factor 3a protein complex. The splicing factor 3a heterotrimer is a component of the mature U2 small nuclear ribonucleoprotein particle (snRNP). U2 small nuclear ribonucleoproteins play a critical role in spliceosome assembly and pre-mRNA splicing. [provided by RefSeq, Aug 2014]

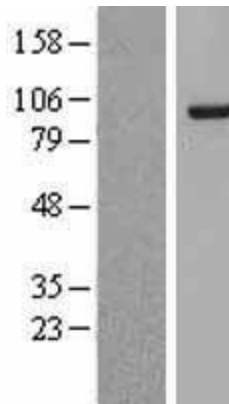
Product images:



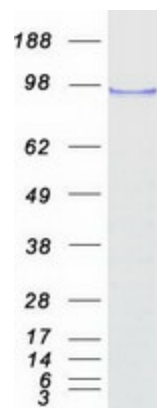
Circular map for RC201098



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SF3A1 (Cat# RC201098, 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-SF3A1 (Cat# [TA800587]). Positive lysates [LY416998] (100ug) and [LC416998] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416998]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201098 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SF3A1 protein (Cat# [TP301098]). The protein was produced from HEK293T cells transfected with SF3A1 cDNA clone (Cat# RC201098) using MegaTran 2.0 (Cat# [TT210002]).