

Product datasheet for **RC205846**

splicing factor 1 (SF1) (NM_201998) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	splicing factor 1 (SF1) (NM_201998) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	splicing factor 1
Synonyms:	BBP; D11S636; MBBP; ZCCHC25; ZFM1; ZNF162
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC205846 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGACCGGAGCGAACGCCACGCCGTTGGACTTCCCAAGTAAGAAGCGGAAGAGGAGCCGCTGGAACC
 AAGACACAATGGAACAGAAGACAGTATTCCAGGAATGCCTACAGTTATCCCCCTGGACTTACTCGAGA
 ACAAGAAAGAGCTTATATAGTCAACTGCAGATAGAAGACCTGACTCGTAAACTGCGCACAGGAGACCTG
 GGCATCCCCCTAACCTGAGGACAGGTCCCCTCCCCTGAGCCCATCTACAATAGCGAGGGGAAGCGGC
 TTAACACCCGAGAGTTCCGCACCCGAAAAAGCTGGAAGAGGAGCGGCACAACCTCATCACAGAGATGGT
 TGCCTCAATCCGGATTTCAAGCCACCTGCAGATTACAAACCTCCAGCAACACGTGTGAGTGATAAAGTC
 ATGATTCCACAAGATGAGTACCCAGAAATCAACTTTGTGGGGCTGCTCATCGGGCCAGAGGGAACACCC
 TGAAGAACATAGAGAAGGAGTCAATGCCAAGATTATGATCCGGGGAAAGGGTCTGTGAAAGAAGGGAA
 GGTGGGGCGCAAAGATGGCCAGATGTTGCCAGGAGAAGATGAGCCACTTCATGCCCTGGTACTGCCAAT
 ACAATGGAGAACGTCAAAAAGGCAGTGAACAGATAAGAAACATCCTGAAGCAGGGTATCGAGACTCCAG
 AGGACCAGAATGATCTACGGAAGATGCAGCTTCGGGAGTTGGCTCGCTTAAATGGGACCCCTTCGGGAAGA
 CGATAACAGGATCTTAAGACCCTGGCAGAGCTCAGAGACCCGAGCATTACCAACACCACAGTGTGTACC
 AAGTGTGGAGGGGCTGGCCACATTTGCTCAGACTGTAAATTCAAAGGCCTGGTGTCTCAGTCAGCTC
 AGGATAAAGCACGGATGGATAAAGAATATTTGTCCTCATGGCTGAAGTGGTGAAGCACCTGTCCCAGC
 ATCTGTGGGCTCCACCTCTGGGCTGCCACCACACCCCTGGCCAGCGCACCTCGTCTGTGCTCCCAGC
 AACACCCACCTCCACCTCTCATGTCTACCACCCAGAGCCGCCACCCTGGATGAATTCTGGCCCTT
 CAGAGAGTCCGGCCTACCACGGCATGCATGGAGTGGTCTGGTGGGGCCGGAGGTGGCCCCACAGCTT
 CCCACACCCATTACCCAGCCTGACAGGTGGGCATGGTGGACATCCCATGCAGCACAAACCCAATGGACCC
 CCACCCCTTGGATGCAGCCACCACCACCCGATGAACCAGGGCCCCCACCCTCTGGGACCATGGCC
 CTCTCCAATGGATCAGTACCTGGGAAGTACGCCTGTGGGCTCTGGGCTATCGCTGCATCAAGGAAA
 AGGTATGATGCCGCCACCACCTATGGGCATGATGCCGCCGCCGCCGCCCTCCAGTGGGCAGCCCCCA
 CCCCCTCCTCTGGTCTTCCCCCATGGCAACAACAGCAGCAGCAGCCTCCGCCACCCCTCCGCCCA
 GCAGCAGTATGGCTTCCAGTACCCCTTGCATGGCAGCAAAGATCCCTCCCCGGCGGGCGATGGCCCG
 AGCCATGAGAGTGAGGACTTCCGCGCCATTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205846 protein sequence
 Red=Cloning site Green=Tags(s)

MATGANATPLDFPSKRRKRSRWQDTMEQKTVIPGMPTVIPPGLTREQERAYIVLQIQLIEDLTKLRTGDL
 GIPPNPEDRSPSPEPIYNSEGRKLNTRFRTKLEERHNLITEMVALNPDFKPPADYKPPATRVSDKV
 MIPQDEYPEINFVGLLIGPRGNTLNKIEKECNAKIMIRGKGSVKEGKVGKRDGQMLPGEDEPLHALVTAN
 TMENVKKAQEIRNLIKQGIETPEDQNDLRKMQRLRELARLNGTLREDDNRILRPWQSSETRITNTTVCT
 KCGGAGHIASDCKFQRPQDPQSAQDKARMDKEYLSLMAELGEAPVPASVGSTSGPATTPLASAPRPAAPA
 NNPPPPSLMSTTQSRPPWMNSGPPSESRPYHGMHGGGPGGPGGPHSFPHPLPSL TGGHGHMPQHNPNGP
 PPPWMQPPPPMNQPHPPGHHGPPPMQYLGSTPVGSGVYRLHQGKGMPPPPMGMPPPPPPPSGQPP
 PPPSGPLPPWQQQQPPPPPPSSMASSTPLPWQQRSLPAAAMARAMRVRTFRAHW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6238_h05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_201998

ORF Size: 1644 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_201998.3](#)

RefSeq Size: 2949 bp

RefSeq ORF: 1647 bp

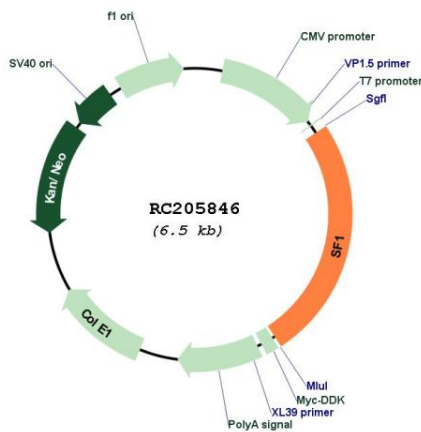
Locus ID: 7536

UniProt ID: [Q15637](#)

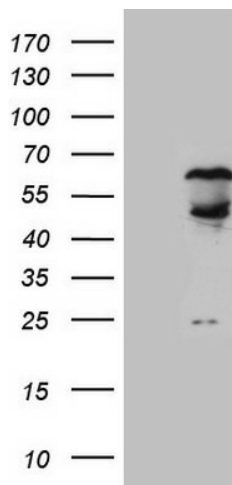
Cytogenetics: 11q13.1
Protein Families: Transcription Factors
MW: 59.7 kDa

Gene Summary: This gene encodes a nuclear pre-mRNA splicing factor. The encoded protein specifically recognizes the intron branch point sequence at the 3' splice site, together with the large subunit of U2 auxiliary factor (U2AF), and is required for the early stages of spliceosome assembly. It also plays a role in nuclear pre-mRNA retention and transcriptional repression. The encoded protein contains an N-terminal U2AF ligand motif, a central hnRNP K homology motif and quaking 2 region which bind a key branch-site adenosine within the branch point sequence, a zinc knuckles domain, and a C-terminal proline-rich domain. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2016]

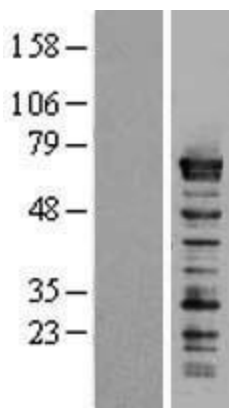
Product images:



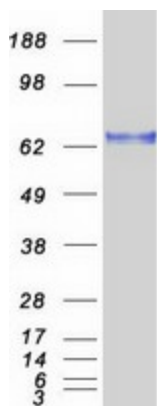
Circular map for RC205846



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SF1 (Cat# RC205846, 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-SF1 (Cat# [TA809477])(1:2000). Positive lysates [LY404505] (100ug) and [LC404505] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY404505]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205846 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SF1 protein (Cat# [TP305846]). The protein was produced from HEK293T cells transfected with SF1 cDNA clone (Cat# RC205846) using MegaTran 2.0 (Cat# [TT210002]).