

Product datasheet for **RC201021**

Suppressor of Fused (SUFU) (NM_016169) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Suppressor of Fused (SUFU) (NM_016169) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Suppressor of Fused
Synonyms:	JBTS32; PRO1280; SUFUH; SUFUXL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC201021 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGAGCTGCGGCCTAGCGGCGCCCCGGCCCCACCGCGCCCCGGCCCTGGCCCGACTGCCCCCC
 CGGCCTTCGCTTCGCTCTTTCCCCGGGACTGCACGCCATCTACGGAGAGTGCCGCCCTTTACCTGA
 CCAGCCGAACCCGCTCCAGGTTACCGCTATCGTCAAGTACTGGTTGGGTGGCCAGACCCCTTGGACTAT
 GTTAGCATGTACAGGAATGTGGGAGCCCTTCTGCTAACATCCCCGAGCACTGGCACTACATCAGCTTCG
 GCCTGAGTGATCTCTATGGTGACAACAGAGTCCATGAGTTACAGGAACAGATGGACCTAGTGGTTTTGG
 CTTTGAGTTGACCTTTCGTCTGAAGAGAGAAAATGGGGAGTCTGCCCCACCAACATGGCCCGCAGAGTTA
 ATGCAGGGCTTGGCAGATACGTGTTCCAGTCAGAGAACACCTTCTGCAGTGGGACCATGTGCTCTGGC
 ACAGCCCTTTGGATAACAGTGAGTCAAGAATTCAGCACATGCTGCTGACAGAGGACCCACAGATGCAGCC
 CGTGCAGACACCCTTTGGGTAGTTACCTTCTCCAGATCGTTGGTGTCTGCACTGAAGAGCTACACTCA
 GCCCAGCAGTGGAACGGGCAGGGCATCCTGGAGCTGCTGCGGACAGTGCCTATTGCTGGCGGCCCTGGC
 TGATAACTGCATGCGGAGGGGAGAGACCATATTTGAGATCGATCCACACCTGCAAGAGAGAGTTGACAA
 AGGCATCGAGACAGATGGCTCCAACCTGAGTGGTGTGAGTCCAAAGTGTGCTGGGATGACCTGAGCCGG
 CCCCCGAGGATGACGAGGACAGCCGGAGCATCTGCATCGGCACACAGCCCCGGCGACTCTCTGGCAAAG
 ACACAGAGCAGATCCGGGAGACCCTGAGGAGAGGACTCGAGATCAACAGCAAACCTGTCTTCCACCAAT
 CAACCCCTCAGCGGCAGAAATGGCCTCGCCACGACCGGGCCCCGAGCCGCAAAGACAGCCTGGAAAGTGAC
 AGCTCCACGGCCATCATTCCCCATGAGCTGATTCGCACGCGGCAGCTTGGAGCGTACATCTGAAATTCA
 ACCAGGATCCGGAGCCCTCATTCTCTGCTGCCTAAGGGGCAGGCTCTGCATGGACGGCCTTACATA
 TAAAAGTATCACAGGTGACATGGCCATCACGTTTGTCTCCACGGGAGTGAAGGCCCTTTGCCACTGAG
 GAGCATCCTTACGCGGCTCATGGACCCTGGTTACAAATTCTGTTGACCGAAGAGTTTGTAGAGAAAATGT
 TGGAGGATTTAGAAGATTTGACTTCTCCAGAGGAATCAAACCTCCCAAAGAGTACAGCTGGCCTGAAAA
 GAAGCTGAAGGTCTCCATCCTGCCTGACGTGGTGTTCGACAGTCCGCTACAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201021 protein sequence
 Red=Cloning site Green=Tags(s)

MAELRPSGAPGPTAPPAPGPTAPPAFASLFPPGLHAIYGEERLL YPDQPNPLQVTAIVKYWLGPDPLDY
 VSMYRNVGSPSANIPEHWHYISFGLSDL YGDNRVHEFTGTDGPSGFGFELTFRLKRETGESAPPTWPAEL
 MQGLARYVVFQSENTFCSGDHVSWHSPLDNSESRIQHMLL TEDPQMOPVQTPFGVVTFLQIVGVCTEELHS
 AQQWNGQGILELLRTPVIAAGPWLITDMRRGETIFEIDPHLQERVDKGIETDGSNL SGVSAKCAWDDL SR
 PPEDDEDSRSICIGTQPRRLSGKDTEQIRETLRRGLEINSKPVLPPINPQRQNGLAHDRAPSRKDSLES
 SSTAIIPHELIRTRQLESVHLKFNQESGAL IPLCLRGRLLHGRHFTYKSITGDMAITFVSTGVEGAFATE
 EHPYAAHGPWLQILL TEEFVEKMLEDLTSPPEEFKLPKEYSWPEKCLKVSILPDVVFDSPLH

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6153_h01.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_016169

ORF Size: 1452 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_016169.4](#)

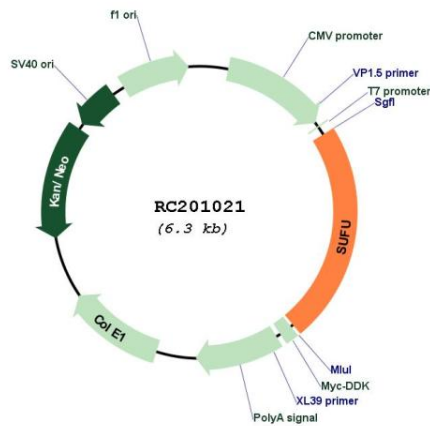
RefSeq Size: 4994 bp

RefSeq ORF: 1455 bp

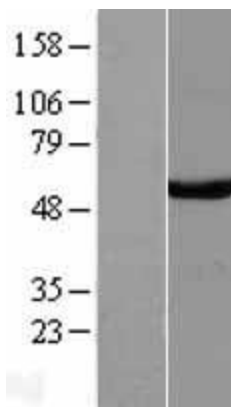
Locus ID: 51684

UniProt ID:	Q9UMX1
Cytogenetics:	10q24.32
Domains:	SUFU
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer
MW:	53.9 kDa
Gene Summary:	The Hedgehog signaling pathway plays an important role in early human development. The pathway is a signaling cascade that plays a role in pattern formation and cellular proliferation during development. This gene encodes a negative regulator of the hedgehog signaling pathway. Defects in this gene are a cause of medulloblastoma. Alternative splicing results in multiple transcript variants.[provided by RefSeq, May 2010]

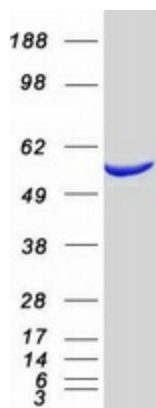
Product images:



Circular map for RC201021



Western blot validation of overexpression lysate (Cat# [LY402511]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201021 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SUFU protein (Cat# [TP301021]). The protein was produced from HEK293T cells transfected with SUFU cDNA clone (Cat# RC201021) using MegaTran 2.0 (Cat# [TT210002]).