

Product datasheet for **RC210744**

SMU1 (NM_018225) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMU1 (NM_018225) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SMU1
Synonyms:	BWD; fSAP57; SMU-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC210744 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGATCGAAATCGAATCTTCGGATGTGATCCGCCTTATTATGCAGTACTTGAAGGAGAACAGTTTAC
 ATCGGGCGTTAGCCACCTTGCAGGAGGAGACTACTGTGTCTCTGAATACTGTGGACAGCATTGAGAGTTT
 TGTGGCTGACATTAACAGTGGCCATTGGGATACTGTGTCAGGTTATACAGTCTCTGAAATTGCCAGAC
 AAAACCTCATTGACCTCTATGAACAGGTTGTTCTGGAATTGATAGAGCTCCGTGAATTGGGTGCTGCCA
 GGTCACTTTTGGACAGACTGATCCCATGATCATGTTAAACAAACACAGCCAGAGCGATATATTCATCT
 GGAGAACCTTTTGGCCAGGTCTTACTTTGATCCTCGTGAGGCATACCCAGATGGAAGTAGCAAAGAAAAG
 AGAAGAGCAGCAATTGCCAGGCCTTAGCTGGCGAAGTCAGTGTGGTGCCTCCATCTCGTCTCATGGCAT
 TGCTGGGACAGGCACTGAAGTGGCAGCAGCATCAGGGATTGCTTCTCCTGGTATGACCATAGATTTGTT
 TCGAGGCAAGGCAGCTGTCAAAGATGTGGAAGAAGAAAAGTTTCTACACAAGTGAAGCAGGCATATTAAG
 TTTGGTGAGAAATCACATGTGGAGTGTGCTCGATTTTCTCCAGATGGTCACTATTTGGTCACTGGGTCTG
 TTGATGGATTCAATGAAGTATGGAACCTTACTACTGGAAGAAATCAGAAAGGATCTTAAGTACCAGGCCCA
 AGATAACTTTATGATGATGGATGATGCTGTCTCTGATGTGTTTCAGCAGAGATACAGAAATGTTAGCA
 ACTGGGGCCCAAGATGGAAGAAATCAAGGTGTGGAAGATTCAGAGTGGACAATGTTTAAGGAGATTGAGA
 GGGCACACAGTAAGGGTGTACCTGTCTAAGCTTTTCTAAGGATAGCAGTCAGATCCTTAGTGCTCTTT
 TGACCAGACAATTAGAATTCATGGTTTAAATCTGGGAAAACCTGAAGGAATTCGTGGCCATTCCTCC
 TTTGTTAACGAAGCAACATTTACACAAGATGGACATTACATTATTAGTGCATCCTCTGATGGCACTGTAA
 AGATCTGGAATATGAAGACCACAGAATGTTCAAATACCTTTAAATCCCTGGGCAGCACCGCAGGGACAGA
 TATTACCGTCAACAGTGTGATTCTACTTCTAAAAACCTGAGCACTTTGTGGTGTGCAACAGATCAAAAC
 ACGGTGGTCATCATGAACATGCAGGGGCAGATTGTGAGAAGCTTCAGTTCTGGTAAAAGAGAAGGTGGGG
 ACTTTGTTGCTGTGCCCTCTCTCCCGTGGTGAATGGATCTACTGTGTAGGGGAGGACTTTGTGCTCTA
 CTGTTTCAGTACAGTCACTGGCAAAGTGGAGAGAACTTTGACAGTGCACGAGAAGGATGTGATTGGTATT
 GCACATCACCTCATCAGAACCTGATTGCTACCTACAGTGAAGATGCACTCCTAAAGCTCTGGAACCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210744 protein sequence
 Red=Cloning site Green=Tags(s)

MSIEIESSDVIRLIMQYLKENS LHRALATLQEETTVSLNTVDSIESFVADINS GHWDTVLQVIQSLKLPD
 KTLIDLIEQVLELIELRELGAARSLLRQTDPMIMLKQTQPERYIHLNLLARSYFDPREAYPDGSSKEK
 RRAAIAQALAGEVSVVPPSRMLALLGQALKWQQHQGLLPPGMTIDLFRGKA AVKDVEEEKFPTQLSRHIK
 FGQKSHVECARFSPDGQYLVTGSVDGFIEVWNFTTGKIRKDLKYQAQDNFMMDDAVLCMCFSRDTEMLA
 TGAQDGKIKVWKIQSGQCLRRFERAHSKGVTCLSFSKDSSQILSASFDTIRIHGLKSGKTLKEFRGHSS
 FVNEATFTQDGHYIISASSDGTVKIWNMKTTECSNTFKSLGSTAGTDITVNSVILLPKNPEHFVVCNRSN
 TVVIMMQGQIVRSFSSGKREGGDFVCCALSPRGEWIYCVGEDFVLYCFSTVTGKLERTLTVHEKDVIGI
 AHHPHQNLTIATYSEDALLKLWKP

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6586_f07.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_018225

ORF Size: 1539 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_018225.3](#)

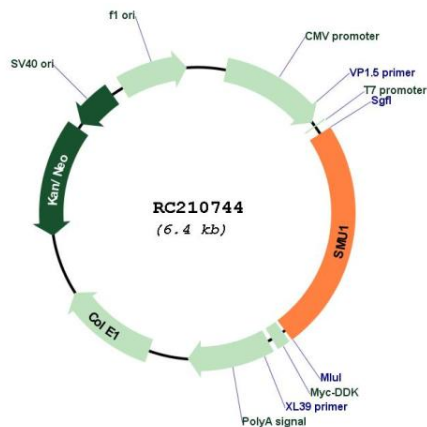
RefSeq Size: 7091 bp

RefSeq ORF: 1542 bp

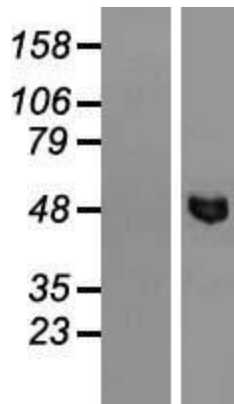
Locus ID: 55234

UniProt ID:	<u>Q2TAY7</u>
Cytogenetics:	9p21.1
Domains:	WD40, LisH, CTLH
MW:	57.6 kDa
Gene Summary:	Involved in pre-mRNA splicing as a component of the spliceosome (PubMed:28781166). Regulates alternative splicing of the HSPG2 pre-mRNA (By similarity). Required for normal accumulation of IK (PubMed:24945353). Required for normal mitotic spindle assembly and normal progress through mitosis (By similarity).[UniProtKB/Swiss-Prot Function]

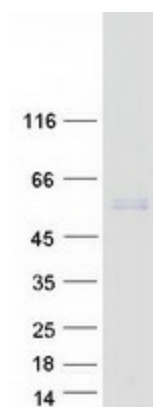
Product images:



Circular map for RC210744



Western blot validation of overexpression lysate (Cat# [LY413205]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210744 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SMU1 protein (Cat# [TP310744]). The protein was produced from HEK293T cells transfected with SMU1 cDNA clone (Cat# RC210744) using MegaTran 2.0 (Cat# [TT210002]).