

Product datasheet for **RC206350**

SUPV3L1 (NM_003171) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUPV3L1 (NM_003171) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SUPV3L1
Synonyms:	SUV3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC206350 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCCTTCTCCCGTGCCTATTGTGGCTCGGCTCCCGCGGGCGCCAGGCTGGCCACCGGGCAGCCA
TCTGCTCTGCCCTTCGTCCCACTTTGGGCCCTTCCCGGGTCTGGGGCAAGTTTCTGTCTTGCCAC
CGCTCTCTCTGCCTCCGGTGGCTCCAAAATACCAAACACGTCTTGTTCGTGCCCTGACTGTGAAA
CCTCAGGGCCCCAGCGCCGACGGCGACGTGGGGCCGAGCTAACCCGGCCTCTGGACAAGAATGAAGTAA
AGAAGGTCTTAGACAAATTTTACAAGAGGAAAGAAATTCAGAACTGGGTGCTGATTATGGACTTGATGC
TCGTCTCTCCACCAAGCTTTCATAAGCTTTAGAAATTATATTATGCAGTCTCATTCCCTGGATGTGGAC
ATTCACATTGTTTGAATGATATTTGCTTCGGTGCAGCTCATGCGGATGATTTATCCCATTTTTCTTGA
GACATGCCAAACAAATATTTCTGTGTTGGACTGTAAGGATGATCTACGTAAAATCAGTGACTTAAGAT
ACCACCTAACTGGTACCCAGATGCTAGAGCCATGCAGCGGAAGATAATATTTTCATTACAGGCCCCACAAC
AGTGAAAAGACTTATCACGCAATCCAGAAATACTTCTCAGCAAAGTCTGGAGTGTATTGTGGCCCTCAA
AATTACTGGCACATGAGATCTTCGAAAAGAGTAATGCTGCTGGTGTGCCATGTGACTTGGTGACAGGTGA
AGAGCGTGTGACAGTTCAGCCAAATGGGAAACAGGCTTCACATGTTTCTTGTACAGTTGAGATGTGCAGT
GTTACAACCTCTTATGAAGTGGCTGAATTGATGAAATTCAAATGATTAGAGATCCAGCCAGAGGATGGG
CCTGGACCAGAGCACTTCTAGGACTGTGTGCTGAAGAGGTTTCATTTGTGTGGAGAACCTGCTGCTATTGA
CCTGGTGTGAGACTTATGTACACAACGGGGGAGGAAGTGGAGGTTTCGAGACTATAAGAGGCTTACCCCC
ATTTCTGTGCTGGACCATGCCTAGAATCTTTAGATAACCTTCGGCCTGGGGACTGCATTGTCTGTTTTA
GCAAGAATGATATTTATCTGTGAGTCGGCAGATTGAAATTCGGGGATTAGAATCAGCTGTATATATGG
CAGTCTCCACCTGGGACCAAACCTTGCTCAAGCAAAAAAGTTAATGATCCCAATGACCCATGCAAATC
TTGGTTGTACAGATGCAATTGGCATGGGACTTAATTTGAGCATAAGGAGAATTATTTTTACTCCCTTA
TAAAGCCAGTATCAATGAAAAGGGAGAGAGAGAACTAGAACCAATCACAACTCTCAAGCCCTGCAGAT
TGCTGGCAGAGCTGGCAGATTACGCTCACGGTTTAAAGAAGGAGAGGTTACAACAATGAATCATGAAGAT
CTCAGTTTATTAAGGAAATTTGAAGAGGCTGTGGATCCTATAAGGGCAGCTGGTCTTCATCCAACCTG
CTGAGCAGATTGAAATGTTTGCCTACCATCTCCCTGATGCAACACTGTCCAATCTCATTGATATTTTTGT
AGACTTTTACAAGTTGATGGGCAGTATTTTGTCTGCAATATGGATGATTTTAAATTTTCTGCAGAGTTG
ATCCAGCATATTCACCTAAGTCTGCGAGTGAGGTATGTTTCTGCACAGCTCCTATCAACAAGAAGCAGC
CTTTTGTGTGTTCTCACTGTTACAGTTTGCCAGGCAGTATAGCAGGAATGAGCCCTGACCTTTGCATG
GTTACGCCGATACATCAATGGCCTTACTTCCACCTAAGAATATTAAGACCTCATGGATCTTGAAGCT
GTCCACGATGTCTGGATCTTACTTGTGGTAAGCTACCGATTTATGGATATGTTTCCAGATGCCAGCC
TTATTCGAGATCTCCAGAAAGAACTAGATGGTATTATCCAAGATGGTGTGCACAATCACTAAATTTGAT
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GGAACCTTAAAGAGCCAAGCTAGAAGGACACGGCCACCAAAGCTCTAGGGAGTAAAGCTACTGAGCCAC
CCAGCCCCGATGCAGGAGAGCTGTCCCTTGCTTCCAGATTGGTGCAGCAAGGACTCCTCACTCCAGACAT
GCTGAAAACAGCTAGAAAAAGAGTGGATGACACAACAACTGAACACAACAAAGAAAAACAGAGTCTGGG
ACTCATCCAAAAGGGACGAGAAGAAAGAAGAACCTGATTCGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206350 protein sequence
Red=Cloning site Green=Tags(s)

MSFSRALLWARLPAGRQAGHRAAICCSALRPHFGPFPVGLGQVSVLATASSASGGSKIPNTSLFVPLTVK
PQGPSADGDVGAELTRPLDKNEVKKVLDKFYKRKEIQKLGADYGLDARLFHQAFISFRNYIMQSHSLDVD
IHIVLNDICFGAAHADDLFPFFLRHAKQIFPVLDCDDLRKISDLRIPPWYPDARAMQRKIIFHSGPTN
SGKTYHAIQKYFSAKSGVYCGPLKLLAHEIFEKSNAAGVPCDLVTGEERTVQPNGKQASHVSVCTVEMCS
VTPYEVAVIDEIQMIRDPARGAWTRALLGLCAEEVHLCGEPAAIDLVMELMYTTGEEVEVRDYKRLTP
ISVLDHALESLDNLRPGDCIVCFSKNDIYSVSRQIEIRGLESAVIYGSLLPPGTKLAQAKKFNDPNDPCKI
LVATDAIGMGLNLSIRRIIFYSLIKPSINEKGERELEPITTSQALQIAGRAGRFSSRFKEGEVTTMNHED
LSLLKEILKRPVDPIRAAGLHPTAEQIEMFAYHLPDATALSNLIDIFVDFSQVDGQYFVCNMDDFKFSAEL
IQHIPLSLRVRYVFCTAPINKKQPFVCSLLQFARQYSRNEPLTFAWLRRYIKWPLLPKNIKDLMDLEA
VHDVLDLYLWLSYRFMDMFPDASLIRDLOKELDGI IQDGVHNITKLIKMSETHKLLNLEGFSPGSQSRLS
GTLKSQARRTRGKALGSKATEPPSPDAGELSLASRLVQQGLLTPDMLKQLEKEWMTQQTEHNKEKTESG
THPKGTRRRKKKEPDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6695_b05.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_003171

ORF Size: 2358 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_003171.5](#)

RefSeq Size: 2530 bp

RefSeq ORF: 2361 bp

Locus ID: 6832

UniProt ID: [Q8IYB8](#)

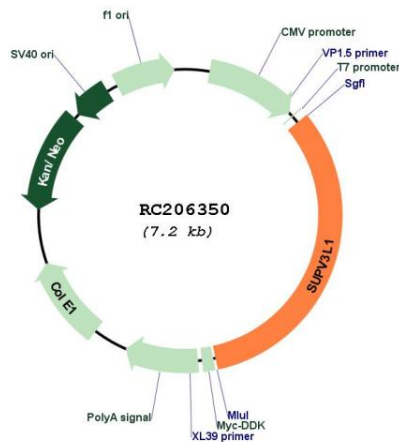
Cytogenetics: 10q22.1

Domains: helicase_C

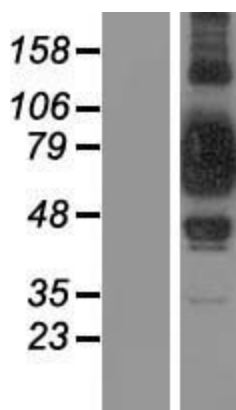
MW: 88 kDa

Gene Summary: Major helicase player in mitochondrial RNA metabolism. Component of the mitochondrial degradosome (mtEXO) complex, that degrades 3' overhang double-stranded RNA with a 3'-to-5' directionality in an ATP-dependent manner. ATPase and ATP-dependent multisubstrate helicase, able to unwind double-stranded (ds) DNA and RNA, and RNA/DNA heteroduplexes in the 5'-to-3' direction. Plays a role in the RNA surveillance system in mitochondria; regulates the stability of mature mRNAs, the removal of aberrantly formed mRNAs and the rapid degradation of non coding processing intermediates. Also implicated in recombination and chromatin maintenance pathways. May protect cells from apoptosis. Associates with mitochondrial DNA.[UniProtKB/Swiss-Prot Function]

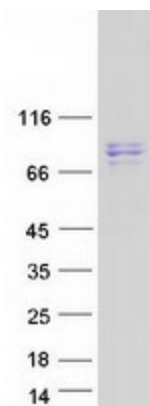
Product images:



Circular map for RC206350



Western blot validation of overexpression lysate (Cat# [LY418860]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206350 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SUPV3L1 protein (Cat# [TP306350]). The protein was produced from HEK293T cells transfected with SUPV3L1 cDNA clone (Cat# RC206350) using MegaTran 2.0 (Cat# [TT210002]).