

Product datasheet for RC226322

SUPT5H (NM_001130824) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUPT5H (NM_001130824) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SUPT5H
Synonyms:	SPT5; SPT5H; Tat-CT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226322 representing NM_001130824 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGGACAGCGAGGACAGCACTTTCCGAGGAGGAGGACAGCGAGCGCAGCAGTGACGGCGAGGAGG
CCGAGGTAGACGAAGAGCGGGGAGTGCAGCGGGCAGTGAGAAAGAAGAAGAGCCTGAGGACGAAGAGGA
GGAGGAAGAGGAGGAGGAATATGATGAGGAAGAGGAAGAAGAAGATGATGACCGACCCCAAGAAACCC
CGCCATGGAGGCTTCATTCTGGACGAGGCTGATGTTGACGATGAGTATGAGGACGAGGACCAGTGGGAGG
ATGGAGCAGAGGACATTCTAGAGAAAGAAGAGATTGAAGCCTCCAATATCGATAATGTTGTCCTGGATGA
AGATCGTTCTGGGCTCGCCGCCTGCAAAACCTCTGGAGGGACCAGCGAGAAGAAGAACTGGGCGAGTAT
TACATGAAGAAATACGCCAAGTCATCTGTGGGAGAGACGGTGTATGGAGGATCTGATGAGCTCTCAGACG
ACATCACCCAGCAGCAGCTGCTCCCAGGAGTCAAGGATCCCAATCTGTGGACTGTCAAATGTAAGATTGG
GGAGGAACGGGCCACGGCCATTTCTTGATGCGCAAGTTCATTGCCTACCAGTTCACAGACACGCCCCCTG
CAGATCAAGTCAGTAGTGGCACCAGAGCATGTGAAGGGTACATCTACGTGGAGGCTACAAGCAGACCC
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CAAGGAGATGACAGACGTGCTCAAAGTGGTGAAGGAGTGGCCAACTGAAACCAAAGTCTGGTCCGC
CTCAAGCGGGCATCTACAAGGATGACATTGCTCAGGTGGACTACGTGGAGCCAGCCAGAACACCATCT
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CAAAAGGAAGAAGTTAAGCGGCCCTCCACAGAGGCTGTTTGATGCTGAGAAGATCAGTCCCTGGGGGT
GATGTTGCTCTGATGGTGACTTCTCATCTTTGAGGGGAACCGTTACAGCCGGAAGGGCTTTCTGTTCA
AGAGCTTCGCCATGTCTGCTGTGATCACGGAGGGTGTGAAGCCAACACTCTCTGAGCTGGAAAAGTTTGA
GGACCAGCCAGAGGGCATTGACCTGGAGGTGGTACTGAGAGCACAGGGAAGGAGCGGGAGCACAACCTC
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ATGGCAACAAGATCACCATCATGCCAAGCATGAGGACCTCAAGGACATGTTGGAGTCCAGCCAGGA
ACTTAGAAAATACTTCAAGATGGGGACCAGTGAAGGTGATTGCTGCCGATTCGAGGGCGACACAGGC



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CTCATTGTGCGGGTGGAGGAGAATTTTCGTTATCCTGTTCTCTGACCTCACCATGCATGAGCTGAAGGTGC
 TCCCCCGGACCTGCAGCTCTGCTCAGAGACAGCATCAGGTGTGGATGTTGGGGCCAGCATGAATGGGG
 CGAGCTGGTGCAGCTGGATCCCCAGACTGTGGGTGTCATCGTGCAGTACAGCGGAGACCTTCCAGGTG
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 CGTCGCCCATGGCTATCAGGCTAGCCCGAGCCCGAGCCCGTGGCTACAGTCTATGACACCTGGAGC
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 AGATCCTCAACCTCCGCTTCTGGGAAGCTCCTGGAAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226322 representing NM_001130824
 Red=Cloning site Green=Tags(s)

MSDSEDSNFSEEDSERSSDGEEAEVDEERRSAAGSEKEEPEDEEEEEEEYDEEEEEEDDRPPKPK
 RHGGFILDADVDEYEDQWEDGAEDILEKEEIEASNIDNVVLDDEDRSGARRLQNLWRDQREELGEY
 YMKKYAKSSVGETVYGGSDDELSDITQQQLPGVKPNLWTVKCKIGEERATAISLMRKF IAYQFTDPL
 QIKSVVAPEHVGYIYVEAYKQTHVKQAIIEGVGNLRLGYWNQMVPIKEMTDVLKVVKEVANLKPWSWR
 LKRGYIKDDIAQVDYVPSQNTISLKMIPRIDYDRIKARMSLKDWF AKRKKFKRPPQRLFDAEKIRSLGG
 DVASDGDFLIFEGNRYSRKGF LFKSFAMSAVITEGVKPTLSELEKFEDQPEGIDLEVVTESTGKEREHNF
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 LIVRVEENFVILFSDLTMHELKVLPRDLQLCSETASGVVDVGGQHEWVGLVQLDPQTVGVIVRLERETFQV
 LNMYGKVVTVRHQAVTRKKDNRF AVALDSEQNNIHVKD I VKVIDGPHSGREGEIRHLFRSFAFLHCKKL
 ENGGMFVCKTRHLVLAGGSKPRDVTNFVGGFAPMSPRISSPMHPSAGGQRGGFGSPGGSGGMSRGRGR
 RDNELIGQTVRISQGPYKGYIGVVKDATESTARVELHSTCQTI SVDRQRLTTVGSRRPGGMTSTYGRTPM
 YGSQTPMYGSGSRTPMYGSQTPLDGSRTPHYGSQTPLDHGSRTPAQSGAWDPNNPNTPSRAEEYEFYAF
 DDEPTSPQAYGGTPNPQTPGYDPSPSPQVNPQYNPQTPGTPAMYNTDQFSPYAAPSPQGSYQSPSPQS
 YHQVAPSPAGYQNTSPASYHPTSPMAYQASPSVPGYSPMTPGAPSPGGYNPHTPGSGIEQNSSDWV
 TTDIQVKVRDYLDTQVVGQTVGIRSVTGMCSVYLDSEKVVVISSEHLEPITPTKNNKVKVILGEDRE
 ATGVLLSIDGEDGIVRMDLDEQLKILNLRFLGKLLLEA

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001130824

ORF Size: 3261 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_001130824.1](#), [NP_001124296.1](#)

RefSeq ORF: 3264 bp

Locus ID: 6829

UniProt ID: [O00267](#)

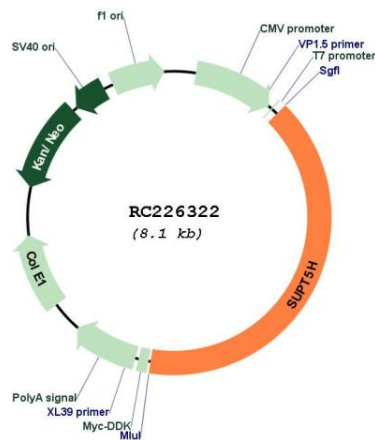
Cytogenetics: 19q13.2

Protein Families: Transcription Factors

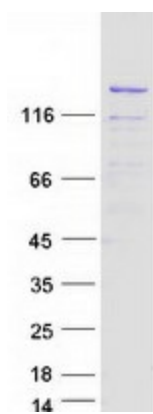
MW: 120.8 kDa

Gene Summary: Component of the DRB sensitivity-inducing factor complex (DSIF complex), which regulates mRNA processing and transcription elongation by RNA polymerase II. DSIF positively regulates mRNA capping by stimulating the mRNA guanylyltransferase activity of RNGTT/CAP1A. DSIF also acts cooperatively with the negative elongation factor complex (NELF complex) to enhance transcriptional pausing at sites proximal to the promoter. Transcriptional pausing may facilitate the assembly of an elongation competent RNA polymerase II complex. DSIF and NELF promote pausing by inhibition of the transcription elongation factor TFIIIS/S-II. TFIIIS/S-II binds to RNA polymerase II at transcription pause sites and stimulates the weak intrinsic nuclease activity of the enzyme. Cleavage of blocked transcripts by RNA polymerase II promotes the resumption of transcription from the new 3' terminus and may allow repeated attempts at transcription through natural pause sites. DSIF can also positively regulate transcriptional elongation and is required for the efficient activation of transcriptional elongation by the HIV-1 nuclear transcriptional activator, Tat. DSIF acts to suppress transcriptional pausing in transcripts derived from the HIV-1 LTR and blocks premature release of HIV-1 transcripts at terminator sequences.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC226322



Coomassie blue staining of purified SUPT5H protein (Cat# [TP326322]). The protein was produced from HEK293T cells transfected with SUPT5H cDNA clone (Cat# RC226322) using MegaTran 2.0 (Cat# [TT210002]).