

Product datasheet for **SC326334**

SUPT5H (NM_001130825) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUPT5H (NM_001130825) Human Untagged Clone
Tag:	Tag Free
Symbol:	SUPT5H
Synonyms:	SPT5; SPT5H; Tat-CT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC326334 representing NM_001130825. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGTCGGACAGCGAGGACAGCAACTTTTCCGAGGAGGAGGACAGCGAGCGCAGCAGTGACGGCGAGGAG
GCCGAGGTAGACGAAGAGCGGGGAGTGCACGGGCAGTGAGAAAGAAGAAGAGCCTGAGGACGAAGAG
GAGGAGGAAGAGGAGGAGGAATACGATGAGGAAGAGGAGGAAGAAGATGATGACCGACCCCAAGAAA
CCCCGCCATGGAGGCTTCATTCTGGACGAGGCTGATGTTGACGATGAGTATGAGGACGAGGACAGTGG
GAGGATGGAGCAGAGGACATTCTAGAGAAAGCCTCCAATATCGATAATGTTGTCCTGGATGAAGATCGT
TCTGGGGCTCGCCGCTGCAAAACCTCTGGAGGGACCAGCGAGAAGAAGAACTGGGCGAGTATTACATG
AAGAAATACGCCAAGTCATCTGTGGGAGAGACGGTGTATGGAGGATCTGATGAGCTCTCAGACGACATC
ACCCAGCAGCAGCTGCTCCCAGGAGTCAAGGATCCAATCTGTGGACTGTCAAATGTAAGATTGGGGAG
GAACGGGCCACGGCCATTTCTTGATGCGCAAGTTCATTGCCCTACCAGTTCACAGACACGCCCTGCAG
ATCAAGTCAGTAGTGGCACCAGAGCATGTGAAGGGCTACATCTACGTGGAGGCCTACAAGCAGACCCAC
GTGAAGCAGGCCATTGAGGGGTGGCAACCTGCGGCTTGCTACTGGAACCAGCAGATGGTGCCCATC
AAGGAGATGACAGACGTGCTCAAAGTGGTGAAGGAGGTGGCAACCTGAAACCAAGTCTGGGTCCGC
CTCAAGCGGGGCATCTACAAGGATGACATTGCTCAGGTGGACTACGTGGAGCCCAGCCAGAACACCATC
TCCCTGAAGATGATCCCACGCATCGACTACGATCGATCAAGGCCCGCATGAGCTTGAAAGACTGGTTT
GCCAAAAGGAAGAAGTTTAAGCGCCTCCACAGAGGCTGTTTGATGCTGAGAAGATCAGGTCCTGGGG
GGTGATGTTGCCCTCTGATGGTGACTTCCTCATCTTTGAGGGGAACCGTTACAGCCGGAAGGGCTTTCTG
TTCAAGAGCTTCGCCATGTCTGCTGTGATCACGGAGGGTGTGAAGCCAACACTCTCTGAGCTGAAAAAG
TTTGAGGACCAGCCAGAGGGCATTGACCTGGAGGTGGTACTGAGAGCACAGGGAAGGAGCGGGAGCAC
AACTTCCAACCTGGGACAACGTGGAGGTCTGTGAGGGTGTGAGCTCATCAACCTGCAGGGCAAGATCCTC
AGCGTGGATGGCAACAAGATCACCATCATGCCAAGCATGAGGACCTCAAGGACATGTTGGAGTTCCCA
GCCAGGAACCTAGAAAATACTTCAAGATGGGGGACCACGTGAAGGTGATTGCTGGCCGATTGAGGGC
GACACAGGCTCATTGTGCGGGTGGAGGAGAATTCGTTATCCTGTTCTCTGACCTACCATGCATGAG
```



[View online »](#)

CTGAAGGTGCTCCCCGGGACCTGCAGCTCTGCTCAGAGACAGCATCAGGTGTGGATGTTGGGGCCAG
 CATGAATGGGGCGAGCTGGTGCAGCTGGATCCCCAGACTGTGGGTGCATCGTGCGACTAGAACGGGAG
 ACCTTCCAGGTGCTGAACATGTACGGGAAGGTGGTACTGTCAGACATCAGGCTGTGACCCGGAAGAAG
 GACAACCGCTTTGCTGTGGCCTTGGACTCAGAGCAGAACAACATCCATGTGAAAGACATCGTTAAGGTC
 ATTGATGGCCCCACTCAGGCCGAGAAGGGGAGATTCCGCATCTTCCGAAGCTTCGCCTTCTACAT
 TGCAAGAACTGGTGGAGAACGGGGGCATGTTTGTCTGCAAGACCCGCCACCTGGTGGCTGGGGGC
 TCAAAGCCCCGTGATGTACCAACTTCACCGTGGTGGCTTTGGCCTATGAGTCCCCGGATCAGCAGC
 CCCATGCACCCAGTGTGGAGGTGAGCGTGGCGGCTTTGGTAGCCAGGTGGCGGCAAGTGGTGGCATG
 AGCAGGGGCCGGGGCCGAGGGACAACGAACCTCATCGGCCAGACCGTGGCGCATCTCCAGGGGCCCTAC
 AAAGGCTACATCGGTGTGGTGAAGATGCCACAGAGTCCACGGCCGTGTGGAGTGCACCTCCACCTGC
 CAGACCATCTGTGGACCGTCAGCGGCTCACCACGGTGGGCTCACGGCGCCCGGGCGGCATGACCTCG
 ACCTATGGGAGGACGCCATGTATGGCTCCAGACGCCATGTATGGCTCTGGCTCCCGAACCCCATG
 TACGGCTCACAGACCCCTCCAGGATGGTAGCCGACCCCACTACGGCTCACAGACGCCCTGCAT
 GATGGCAGCCGACTCCTGCCAGAGTGGGGCCTGGGACCCCAACAACCCCAACACGCCGTACGGGCT
 GAGGAAGAATATGAGTATGCTTTCGATGATGAGCCACCCCGTCCCGCAGGCCTATGGGGGAACCCCC
 AATCCCCAAACACTGGCTACCCAGACCCCTCGTCCCCACAGGTCAACCCACAATACAACCCGCAGACG
 CCAGGGACGCGGCCATGTACAACACAGACCAGTTCTCTCCATGCTGCCCCCTCCCCACAAGTTCC
 TACCAGCCAGCCCCAGCCCCAGAGCTACCACAGGTGGCGCCAAGCCAGCAGGCTACCAGAATACC
 CACTCCCCAGCCAGCTACCACCTACACCGTCGCCATGGCCTATCAGGCTAGCCCCAGCCCGAGCCCC
 GTTGGCTACAGTCTATGACACCTGGAGTCCCTCCCCTGGTGGCTACAACCCACACAGCCAGGCTCA
 GGCATCGAGCAGAAGTCCAGCGACTGGGTAACCACTGACATTGAGGTGAAGGTGCGGGACACCTACCTG
 GATACACAGGTGGTGGGACAGACAGGTGTCATCCGCAGTGTACGGGGGCATGTGCTCTGTGTACCTG
 AAGGACAGTGAGAAGGTTGTCAGCATTTCCAGTGAGCACCTGGAGCCTATCACCCCAACAAGAACAAC
 AAGGTGAAAGTGATCCTGGCGAGGATCGGGAAGCCACGGCGTCTACTGAGCATTGATGGTGGAGGAT
 GGCATTGTCCGTATGGACCTTGTGAGCAGCTCAAGATCCTCAACCTCCGCTTCTGGGGAAGCTCCTG
 GAAGCTGA
 ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM_001130825
- Insert Size:** 3252 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA
- 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_001130825.1](#)

RefSeq Size: 3722 bp

RefSeq ORF: 3252 bp

Locus ID: 6829

UniProt ID: [O00267](#)

Cytogenetics: 19q13.2

Protein Families: Transcription Factors

MW: 120.5 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]

Transcript Variant: This variant (4) differs in the 5' UTR and lacks an alternate in-frame exon compared to variant 1. The resulting isoform (b) has the same N- and C-termini but is shorter compared to isoform a. Variants 4 and 6 encode the same isoform (b).