

## Product datasheet for **TR309005**

### SUPT5H Human shRNA Plasmid Kit (Locus ID 6829)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	SUPT5H Human shRNA Plasmid Kit (Locus ID 6829)
Locus ID:	6829
Synonyms:	SPT5; SPT5H; Tat-CT1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	SUPT5H - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 6829). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001111020</a> , <a href="#">NM_001130824</a> , <a href="#">NM_001130825</a> , <a href="#">NM_001319990</a> , <a href="#">NM_001319991</a> , <a href="#">NM_003169</a> , <a href="#">NM_003169.1</a> , <a href="#">NM_003169.2</a> , <a href="#">NM_003169.3</a> , <a href="#">NM_001130825.1</a> , <a href="#">NM_001111020.1</a> , <a href="#">NM_001111020.2</a> , <a href="#">NM_001130824.1</a> , <a href="#">BC024203</a> , <a href="#">BC024203.2</a> , <a href="#">NM_001130824.2</a> , <a href="#">NM_001111020.3</a>
UniProt ID:	<a href="#">O00267</a>



[View online »](#)

<b>Summary:</b>	<p>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]</p>
<b>shRNA Design:</b>	<p>These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a>.</p>
<b>Performance Guaranteed:</b>	<p>OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.</p> <p>For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).</p>