

### OriGene Technologies, Inc.

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# Product datasheet for SR304661

## Spt6 (SUPT6H) Human siRNA Oligo Duplex (Locus ID 6830)

### **Product data:**

Product Type:	siRNA Oligo Duplexes
Purity:	HPLC purified
Quality Control:	Tested by ESI-MS
Sequences:	Available with shipment
Stability:	One year from date of shipment when stored at -20°C.
# of transfections:	Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final conc. 10 nM).
Note:	Single siRNA duplex (10nmol) can be ordered.
RefSeq:	<u>NM 001320755, NM 003170</u>
UniProt ID:	<u>Q7KZ85</u>
Synonyms:	emb-5; SPT6; SPT6H
Components:	SUPT6H (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 6830) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml
Summary:	Transcription elongation factor which binds histone H3 and plays a key role in the regulation of transcription elongation and mRNA processing. Enhances the transcription elongation by RNA polymerase II (RNAPII) and is also required for the efficient activation of transcriptional elongation by the HIV-1 nuclear transcriptional activator, Tat. Besides chaperoning histones in transcription, acts to transport and splice mRNA by forming a complex with IWS1 and the C- terminal domain (CTD) of the RNAPII subunit RPB1 (POLR2A). The SUPT6H:IWS1:CTD complex recruits mRNA export factors (ALYREF/THOC4, EXOSC10) as well as histone modifying enzymes (such as SETD2), to ensure proper mRNA splicing, efficient mRNA export and elongation-coupled H3K36 methylation, a signature chromatin mark of active transcription. SUPT6H via its association with SETD1A, regulates both class-switch recombination and somatic hypermutation through formation of H3K4me3 epigenetic marks on activation- induced cytidine deaminase (AICDA) target loci. Promotes the activation of the myogenic gene program by entailing erasure of the repressive H3K27me3 epigenetic mark through stabilization of the chromatin interaction of the H3K27 demethylase KDM6A. [UniProtKB/Swiss-Prot Function]



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# **CRICENE**Spt6 (SUPT6H) Human siRNA Oligo Duplex (Locus ID 6830) - SR304661Performance<br/>Guaranteed:OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will<br/>provide at least 70% or more knockdown of the target mRNA when used at 10 nM<br/>concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control<br/>duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT<br/>positive control (cat# SR30003) provides 90% knockdown efficiency.For non-conforming siRNA, requests for replacement product must be made within ninety<br/>(90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with<br/>newly designed duplexes, please contact Technical Services at techsupport@origene.com.<br/>Please provide your data indicating the transfection efficiency and measurement of gene<br/>expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data

required).

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