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Product datasheet for TL309004

Spt6 (SUPT6H) Human shRNA Plasmid Kit (Locus ID 6830)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Spt6 (SUPT6H) Human shRNA Plasmid Kit (Locus ID 6830)
Locus ID:	6830
Synonyms:	emb-5; SPT6; SPT6H
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	SUPT6H - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 6830). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	NM_001320755, NM_003170, NM_003170.1, NM_003170.2, NM_003170.3, NM_003170.4, BC003692, BC003696, BC017105, BC033074, BC073963, BC136522, BC136524, BC150268, BM727811, NM_003170.5
UniProt ID:	Q7KZ85

View online »

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]

shRNA Design:

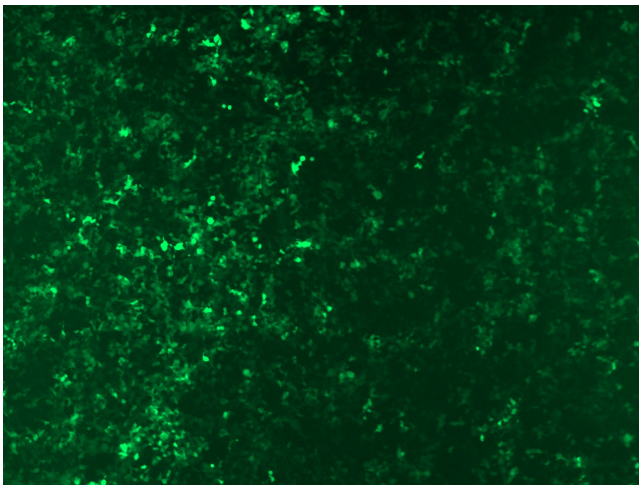
These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed:

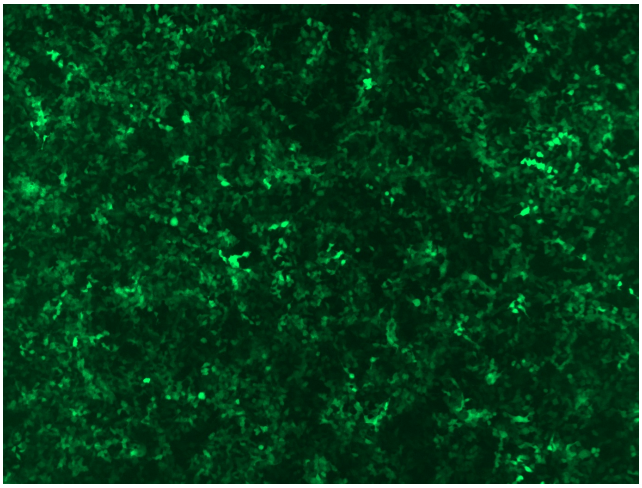
OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. 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.

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 techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

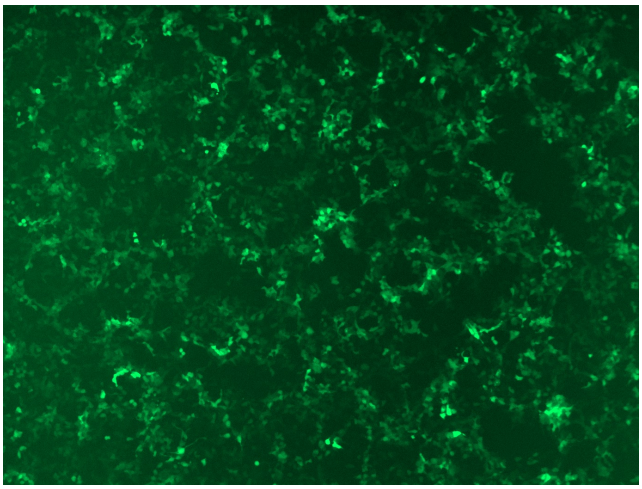
Product images:



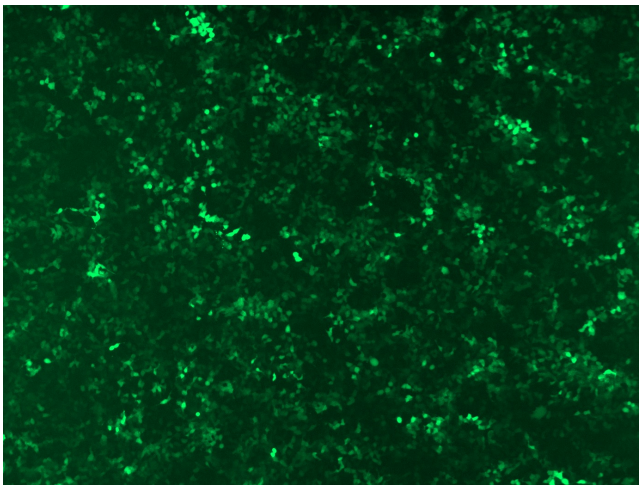
GFP signal was observed under microscope at 48 hours after transduction of TL309004A virus into HEK293 cells. TL309004A virus was prepared using lenti-shRNA TL309004A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL309004B virus into HEK293 cells. TL309004B virus was prepared using lenti-shRNA TL309004B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL309004C] virus into HEK293 cells. [TL309004C] virus was prepared using lenti-shRNA [TL309004C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL309004D] virus into HEK293 cells. [TL309004D] virus was prepared using lenti-shRNA [TL309004D] and [TR30037] packaging kit.