

Product datasheet for **TR301497**

SMG7 Human shRNA Plasmid Kit (Locus ID 9887)

Product data:

Product Type:	shRNA Plasmids
Product Name:	SMG7 Human shRNA Plasmid Kit (Locus ID 9887)
Locus ID:	9887
Synonyms:	C1orf16; EST1C; SGA56M
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	SMG7 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 9887). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001174061 , NM_014837 , NM_173156 , NM_201568 , NM_201569 , NM_001331007 , NM_001350219 , NM_001350220 , NM_001350221 , NM_001350222 , NM_173156.1 , NM_173156.2 , NM_201568.1 , NM_201568.2 , NM_201569.1 , NM_201569.2 , NM_001174061.1 , NM_014837.1 , BC009281 , BC015788 , BC036381 , BC052565 , BM152501 , NM_201568.3 , NM_201569.3 , NM_001174061.2 , NM_173156.3
UniProt ID:	Q92540
Summary:	This gene encodes a protein that is essential for nonsense-mediated mRNA decay (NMD); a process whereby transcripts with premature termination codons are targeted for rapid degradation by a mRNA decay complex. The mRNA decay complex consists, in part, of this protein along with proteins SMG5 and UPF1. The N-terminal domain of this protein is thought to mediate its association with SMG5 or UPF1 while the C-terminal domain interacts with the mRNA decay complex. This protein may therefore couple changes in UPF1 phosphorylation state to the degradation of NMD-candidate transcripts. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Aug 2011]
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 .



[View online »](#)

**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).