

## Product datasheet for **TR701847**

### Rnaseh1 Rat shRNA Plasmid (Locus ID 298933)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Rnaseh1 Rat shRNA Plasmid (Locus ID 298933)
Locus ID:	298933
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Rnaseh1 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 298933). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001013097</a> , <a href="#">NM_001286938</a> , <a href="#">NM_001013097.1</a> , <a href="#">NM_001013097.2</a> , <a href="#">NM_001286938.1</a> , <a href="#">BC091209</a>
UniProt ID:	<a href="#">Q5BK46</a>
Summary:	This gene encodes an endonuclease that specifically degrades the RNA of RNA-DNA hybrids and is necessary for DNA replication and repair. This enzyme is present in both mitochondria and nuclei, which are resulted from translation of a single mRNA with two in-frame initiation start codons. The use of the first start codon produces the mitochondrial isoform and the use of the second start codon produces the nuclear isoform. The production of the mitochondrial isoform is modulated by an upstream open reading frame (uORF) which encodes 7aa in rat. [provided by RefSeq, Nov 2013]
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 <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> .



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**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](mailto: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).