

Product datasheet for **TR500545**

Dnase1 Mouse shRNA Plasmid (Locus ID 13419)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Dnase1 Mouse shRNA Plasmid (Locus ID 13419)
Locus ID:	13419
Synonyms:	AI788650; DNase1; Dnl1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Dnase1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 13419). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC014718 , BC030394 , BC115570 , BC115571 , NM_010061 , NM_001357143 , NM_010061.1 , NM_010061.2 , NM_010061.3 , NM_010061.4 , NM_010061.5
UniProt ID:	P49183
Summary:	Serum endocuclease secreted into body fluids by a wide variety of exocrine and endocrine organs (PubMed:29191910). Expressed by non-hematopoietic tissues and preferentially cleaves protein-free DNA. Among other functions, seems to be involved in cell death by apoptosis. Binds specifically to G-actin and blocks actin polymerization (By similarity). Together with DNASE1L3, plays a key role in degrading neutrophil extracellular traps (NETs) (PubMed:29191910). NETs are mainly composed of DNA fibers and are released by neutrophils to bind pathogens during inflammation (PubMed:29191910). Degradation of intravascular NETs by DNASE1 and DNASE1L3 is required to prevent formation of clots that obstruct blood vessels and cause organ damage following inflammation (PubMed:29191910). [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 .



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