

## **Product datasheet for TR313403**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **DNMT3L Human shRNA Plasmid Kit (Locus ID 29947)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** DNMT3L Human shRNA Plasmid Kit (Locus ID 29947)

**Locus ID:** 29947

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: DNMT3L - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

29947). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

**RefSeq:** BC002560, NM 013369, NM 175867, NM 013369.1, NM 013369.2, NM 013369.3,

NM 175867.1, NM 175867.2, BC002560.2, NM 013369.4, NM 175867.3

UniProt ID: Q9U|W3

Summary: CpG methylation is an epigenetic modification that is important for embryonic development,

imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a nuclear protein

with similarity to DNA methyltransferases, but is not thought to function as a DNA methyltransferase as it does not contain the amino acid residues necessary for

methyltransferase activity. However, it does stimulate de novo methylation by DNA cytosine methyltransferase 3 alpha and is thought to be required for the establishment of maternal genomic imprints. This protein also mediates transcriptional repression through interaction with histone deacetylase 1. Alternatively spliced transcript variants encoding different

isoforms have been found for this gene. [provided by RefSeq, Jul 2012]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





## 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).