

## **Product datasheet for TL309517**

## 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

## SESN1 Human shRNA Plasmid Kit (Locus ID 27244)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** SESN1 Human shRNA Plasmid Kit (Locus ID 27244)

**Locus ID:** 27244

**Synonyms:** PA26; SEST1

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Puromycin

Selection:

Format: Lentiviral plasmids

**Components:** SESN1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 27244).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

**RefSeq:** NM 001199933, NM 001199934, NM 014454.1, NM 014454.2, NM 001199934.1,

NM 001199933.1, BC112036, BC112036.1, BC113569, NM 014454.3

UniProt ID: Q9Y6P5

Summary: This gene encodes a member of the sestrin family. Sestrins are induced by the p53 tumor

suppressor protein and play a role in the cellular response to DNA damage and oxidative stress. The encoded protein mediates p53 inhibition of cell growth by activating AMP-activated protein kinase, which results in the inhibition of the mammalian target of rapamycin protein. The encoded protein also plays a critical role in antioxidant defense by regenerating overoxidized peroxiredoxins, and the expression of this gene is a potential marker for exposure to radiation. Alternatively spliced transcript variants encoding multiple

isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]

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).