

Product datasheet for TF309433

OriGene Technologies, Inc.

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SIRT1 Human shRNA Plasmid Kit (Locus ID 23411)

Product data:

Product Type: shRNA Plasmids

Product Name: SIRT1 Human shRNA Plasmid Kit (Locus ID 23411)

Locus ID: 23411

Synonyms: SIR2; SIR2alpha; SIR2L1

Vector: pRFP-C-RS (TR30014)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format:

Retroviral plasmids

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Components: SIRT1 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 23411).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 001142498, NM 001314049, NM 012238, NM 012238.1, NM 012238.2, NM 012238.3,

NM 012238.4, NM 001142498.1, BC012499, NM 012238.5

UniProt ID: 096EB6

Summary: This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2

protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Alternative splicing results in multiple

transcript variants. [provided by RefSeq, Dec 2008]

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).