

Product datasheet for TL309431V

OriGene Technologies, Inc.

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SIRT4 Human shRNA Lentiviral Particle (Locus ID 23409)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: SIRT4 Human shRNA Lentiviral Particle (Locus ID 23409)

Locus ID: 23409 Synonyms: SIR2L4

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: SIRT4 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: <u>NM 012240, NM 012240.1, NM 012240.2, BC034736, BC109319, BC109320</u>

UniProt ID: Q9Y6E7

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 IV of the sirtuin family. [provided by RefSeq, Jul 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>.

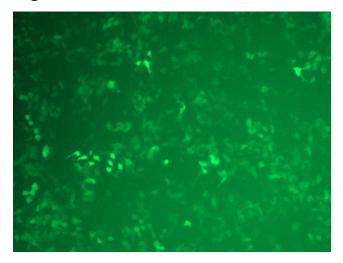


Performance Guaranteed:

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.

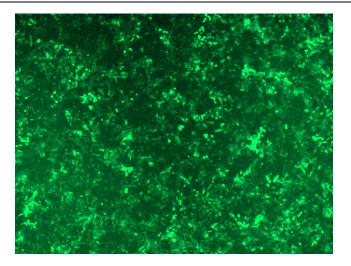
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

Product images:

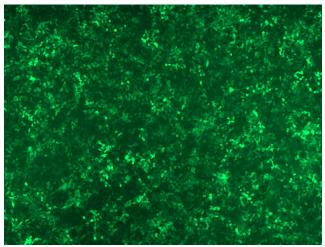


GFP signal was observed under microscope at 48 hours after transduction of TL309431A virus into HEK293 cells. TL309431A virus was prepared using lenti-shRNA TL309431A and [TR30037] packaging kit.

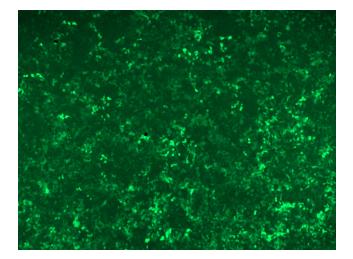




GFP signal was observed under microscope at 48 hours after transduction of TL309431B virus into HEK293 cells. TL309431B virus was prepared using lenti-shRNA TL309431B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL309431C] virus into HEK293 cells. [TL309431C] virus was prepared using lenti-shRNA [TL309431C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL309431D] virus into HEK293 cells. [TL309431D] virus was prepared using lenti-shRNA [TL309431D] and [TR30037] packaging kit.