

## **Product datasheet for TR302999**

#### OriGene Technologies, Inc.

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### **GRIM19 (NDUFA13) Human shRNA Plasmid Kit (Locus ID 51079)**

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** GRIM19 (NDUFA13) Human shRNA Plasmid Kit (Locus ID 51079)

**Locus ID:** 51079

**Synonyms:** B16.6; CDA016; CGI-39; GRIM-19; GRIM19; MC1DN28

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: NDUFA13 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

51079). 5µg purified plasmid DNA per construct

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

**RefSeq:** NM 015965, NM 015965.1, NM 015965.2, NM 015965.3, NM 015965.4, NM 015965.5,

NM 015965.6, BC000589, BC009189, BM839920

UniProt ID: Q9P0|0

**Summary:** This gene encodes a subunit of the mitochondrial membrane respiratory chain NADH

dehydrogenase (Complex I), which functions in the transfer of electrons from NADH to the respiratory chain. The protein is required for complex I assembly and electron transfer activity. The protein binds the signal transducers and activators of transcription 3 (STAT3) transcription factor, and can function as a tumor suppressor. The human protein purified from mitochondria migrates at approximately 16 kDa. Transcripts originating from an

upstream promoter and capable of expressing a protein with a longer N-terminus have been found, but their biological validity has not been determined. [provided by RefSeq, Oct 2009]

**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).