

## **Product datasheet for TR302998**

## OriGene Technologies, Inc.

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## NDUFAF1 Human shRNA Plasmid Kit (Locus ID 51103)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: NDUFAF1 Human shRNA Plasmid Kit (Locus ID 51103)

**Locus ID:** 51103

Synonyms: CGI-65; CGI65; CIA30; MC1DN11

**Vector:** pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: NDUFAF1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

51103). 5µg purified plasmid DNA per construct

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

RefSeq: NM 016013, NR 045620, NM 016013.1, NM 016013.2, NM 016013.3, BC000780, BC000780.2,

NM 016013.4

UniProt ID: Q9Y375

Summary: This gene encodes a complex I assembly factor protein. Complex I (NADH-ubiquinone

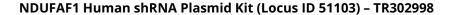
oxidoreductase) catalyzes the transfer of electrons from NADH to ubiquinone (coenzyme Q) in the first step of the mitochondrial respiratory chain, resulting in the translocation of protons across the inner mitochondrial membrane. The encoded protein is required for assembly of complex I, and mutations in this gene are a cause of mitochondrial complex I deficiency. Alternatively spliced transcript variants have been observed for this gene, and a pseudogene of this gene is located on the long arm of chromosome 19. [provided by RefSeq,

Dec 2011]

**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).