

Product datasheet for TG501448

Ndufv1 Mouse shRNA Plasmid (Locus ID 17995)

Product data:

Product Type: shRNA Plasmids

Product Name: Ndufv1 Mouse shRNA Plasmid (Locus ID 17995)

Locus ID: 17995

Synonyms: CI-51kD

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Ndufv1 - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 17995).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: <u>BC014818</u>, <u>BC041682</u>, <u>NM 133666</u>, <u>NM 133666.1</u>, <u>NM 133666.2</u>, <u>NM 133666.3</u>

UniProt ID: Q91YT0

Summary: This gene encodes a subunit of the NADH-ubiquinone oxidoreductase (complex I) enzyme,

which is a large, multimeric protein. It is the first enzyme complex in the mitochondrial electron transport chain and catalyzes the transfer of electrons from NADH to the electron acceptor ubiquinone. The proton gradient created by electron transfer drives the conversion of ADP to ATP. This gene is a core subunit and is conserved in prokaryotes and eukaryotes. The human ortholog of this protein has been characterized. It has consensus motifs for NADH, flavin mononucleotide, and iron-sulfur binding sites and participates in the oxidation of NADH as part of the dehydrogenase module of complex I. In humans, deficiencies in complex I are associated with myopathies, encephalomyopathies, and neurodegenerative

disorders. [provided by RefSeq, Jun 2013]

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 custom shRNA service.



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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).