

Product datasheet for TL513326

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Ndufv2 Mouse shRNA Plasmid (Locus ID 72900)

Product data:

Product Type: shRNA Plasmids

Product Name: Ndufv2 Mouse shRNA Plasmid (Locus ID 72900)

Locus ID: 72900

Synonyms: 2900010C23Rik

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Ndufv2 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 72900).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: BC030946, NM 001278415, NM 028388, NM 028388.1, NM 028388.2, NM 001278415.1

UniProt ID: Q9D6|6

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 bovine ortholog of this protein has been characterized and is reported to contain an iron-sulfur cluster, which may be involved in electron transfer. In humans mutations in this gene are implicated in Parkinson's disease, bipolar disorder, schizophrenia, and have been found in one case of early onset hypertrophic cardiomyopathy and encephalopathy. A pseudogene of this gene is located on chromosome 3. Alternative splicing results in multiple transcript

variants encoding different isoforms. [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 <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).