

Product datasheet for TL311221

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OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

NDUFS1 Human shRNA Plasmid Kit (Locus ID 4719)

Product data:

Product Type: shRNA Plasmids

Product Name: NDUFS1 Human shRNA Plasmid Kit (Locus ID 4719)

Locus ID:

Synonyms: CI-75k; CI-75Kd; MC1DN5; PRO1304

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

NDUFS1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 4719). Components:

5µg purified plasmid DNA per construct

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

NM 001199981, NM 001199982, NM 001199983, NM 001199984, NM 005006, NM 005006.1, RefSeq:

> NM 005006.2, NM 005006.3, NM 005006.4, NM 005006.5, NM 005006.6, NM 001199982.1, NM 001199983.1, NM 001199981.1, NM 001199984.1, BC030833, BC004133, BC012068,

BC018900, BC022368, NM 001199982.2, NM 001199983.2, NM 001199981.2

UniProt ID: P28331

The protein encoded by this gene belongs to the complex I 75 kDa subunit family. **Summary:**

> Mammalian complex I is composed of 45 different subunits. It locates at the mitochondrial inner membrane. This protein has NADH dehydrogenase activity and oxidoreductase activity. It transfers electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. This protein is the largest subunit of complex I and it is a component of the iron-sulfur (IP) fragment of the enzyme. It may form part of the active site crevice where NADH is oxidized. Mutations in this gene are associated with

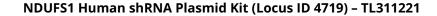
> complex I deficiency. Several transcript variants encoding different isoforms have been found

for this gene. [provided by RefSeq, Jan 2011]

These shRNA constructs were designed against multiple splice variants at this gene locus. To shRNA Design:

> 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.







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).