

## Product datasheet for TR311221

### 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:	4719
Synonyms:	CI-75k; CI-75Kd; MC1DN5; PRO1304
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	NDUFS1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 4719). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001199981</a> , <a href="#">NM_001199982</a> , <a href="#">NM_001199983</a> , <a href="#">NM_001199984</a> , <a href="#">NM_005006</a> , <a href="#">NM_005006.1</a> , <a href="#">NM_005006.2</a> , <a href="#">NM_005006.3</a> , <a href="#">NM_005006.4</a> , <a href="#">NM_005006.5</a> , <a href="#">NM_005006.6</a> , <a href="#">NM_001199982.1</a> , <a href="#">NM_001199983.1</a> , <a href="#">NM_001199981.1</a> , <a href="#">NM_001199984.1</a> , <a href="#">BC030833</a> , <a href="#">BC004133</a> , <a href="#">BC012068</a> , <a href="#">BC018900</a> , <a href="#">BC022368</a> , <a href="#">NM_001199982.2</a> , <a href="#">NM_001199983.2</a> , <a href="#">NM_001199981.2</a>
UniProt ID:	<a href="#">P28331</a>
Summary:	The protein encoded by this gene belongs to the complex I 75 kDa subunit family. 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]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](mailto: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).