

## Product datasheet for **TR516765**

### **Ndufa7 Mouse shRNA Plasmid (Locus ID 66416)**

#### **Product data:**

<b>Product Type:</b>	shRNA Plasmids
<b>Product Name:</b>	Ndufa7 Mouse shRNA Plasmid (Locus ID 66416)
<b>Locus ID:</b>	66416
<b>Synonyms:</b>	14.5kD; 14.5kDa; 2400007M02Rik; CI-B14.5a
<b>Vector:</b>	pRS (TR20003)
<b>E. coli Selection:</b>	Ampicillin
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Retroviral plasmids
<b>Components:</b>	Ndufa7 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 66416). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
<b>RefSeq:</b>	<a href="#">BC052817</a> , <a href="#">BC055698</a> , <a href="#">NM_023202</a> , <a href="#">NR_103514</a> , <a href="#">NR_103515</a> , <a href="#">NR_103516</a> , <a href="#">NM_023202.1</a> , <a href="#">NM_023202.2</a> , <a href="#">NM_023202.3</a> , <a href="#">NM_023202.4</a> , <a href="#">BC044054</a>
<b>UniProt ID:</b>	<a href="#">Q9Z1P6</a>
<b>Summary:</b>	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. Complex I has been biochemically separated into four fractions. The bovine ortholog of this protein has been reported to be part of the I-lambda fraction, which forms the extrinsic globular domain. In humans, deficiencies in complex I are associated with myopathies, encephalomyopathies, and neurodegenerative disorders. Pseudogenes of this gene are located on chromosomes 7 and 16. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2013]
<b>shRNA Design:</b>	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).