

Product datasheet for **TR503606**

Iscu Mouse shRNA Plasmid (Locus ID 66383)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Iscu Mouse shRNA Plasmid (Locus ID 66383)
Locus ID:	66383
Synonyms:	2310020H20Rik; AA407971; Nifu; Nifun
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Iscu - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 66383). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC048409 , BC096049 , NM_025526 , NM_025526.1 , NM_025526.2 , NM_025526.3 , NM_025526.4 , BC028800 , NM_001363317 , NM_025526.5
UniProt ID:	Q9D7P6
Summary:	Scaffold protein for the de novo synthesis of iron-sulfur (Fe-S) clusters within mitochondria, which is required for maturation of both mitochondrial and cytoplasmic [2Fe-2S] and [4Fe-4S] proteins. First, a [2Fe-2S] cluster is transiently assembled on the scaffold protein ISCU. In a second step, the cluster is released from ISCU, transferred to a glutaredoxin GLRX5, followed by the formation of mitochondrial [2Fe-2S] proteins, the synthesis of [4Fe-4S] clusters and their target-specific insertion into the recipient apoproteins. Cluster assembly on ISCU depends on the function of the cysteine desulfurase complex NFS1-LYRM4/ISD11, which serves as the sulfur donor for cluster synthesis, the iron-binding protein frataxin as the putative iron donor, and the electron transfer chain comprised of ferredoxin reductase and ferredoxin, which receive their electrons from NADH (By similarity).[UniProtKB/Swiss-Prot Function]
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 techsupport@origene.com . 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).