

OriGene Technologies, Inc.

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# Product datasheet for TL311490

## Mitofusin 2 (MFN2) Human shRNA Plasmid Kit (Locus ID 9927)

### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	Mitofusin 2 (MFN2) Human shRNA Plasmid Kit (Locus ID 9927)
Locus ID:	9927
Synonyms:	CMT2A; CMT2A2; CMT2A2A; CMT2A2B; CPRP1; HMSN6A; HSG; MARF
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	MFN2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 9927). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<u>NM 001127660</u> , <u>NM 014874, NM 014874.1</u> , <u>NM 014874.2</u> , <u>NM 014874.3</u> , <u>NM 001127660.1</u> , <u>BC017061, BC017061.1</u> , <u>NM 014874.4</u>
UniProt ID:	<u>095140</u>
Summary:	This gene encodes a mitochondrial membrane protein that participates in mitochondrial fusion and contributes to the maintenance and operation of the mitochondrial network. This protein is involved in the regulation of vascular smooth muscle cell proliferation, and it may play a role in the pathophysiology of obesity. Mutations in this gene cause Charcot-Marie-Tooth disease type 2A2, and hereditary motor and sensory neuropathy VI, which are both disorders of the peripheral nervous system. Defects in this gene have also been associated with early-onset stroke. Two transcript variants encoding the same protein have been identified. [provided by RefSeq, Jul 2008]
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 custom shRNA service.



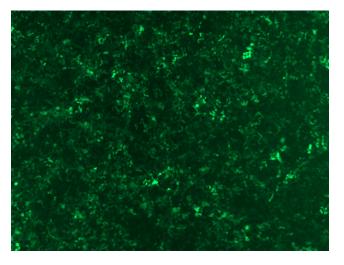
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#### Serigene Mitofusin 2 (MFN2) Human shRNA Plasmid Kit (Locus ID 9927) – TL311490

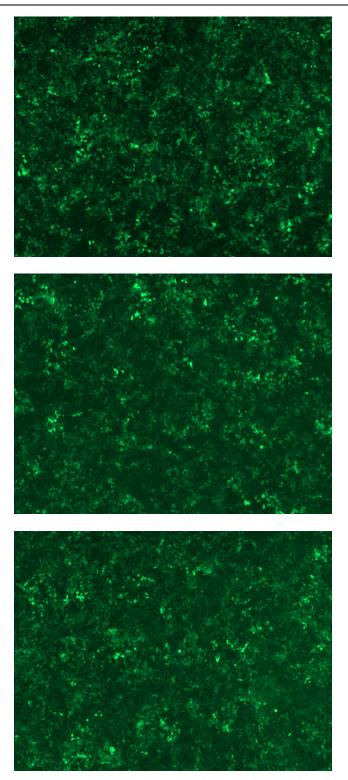
Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency 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).

# **Product images:**



GFP signal was observed under microscope at 48 hours after transduction of TL311490A virus into HEK293 cells. TL311490A virus was prepared using lenti-shRNA TL311490A and [TR30037] packaging kit.

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GFP signal was observed under microscope at 48 hours after transduction of TL311490B virus into HEK293 cells. TL311490B virus was prepared using lenti-shRNA TL311490B and [TR30037] packaging kit.

GFP signal was observed under microscope at 48 hours after transduction of [TL311490C] virus into HEK293 cells. [TL311490C] virus was prepared using lenti-shRNA [TL311490C] and [TR30037] packaging kit.

GFP signal was observed under microscope at 48 hours after transduction of [TL311490D] virus into HEK293 cells. [TL311490D] virus was prepared using lenti-shRNA [TL311490D] and [TR30037] packaging kit.

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