

Product datasheet for TF311490

OriGene Technologies, Inc.

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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: pRFP-C-RS (TR30014)

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

Mammalian Cell

Puromycin

Selection:

Format: Retroviral plasmids

Components: MFN2 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 9927).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 001127660, NM 014874, NM 014874.1, NM 014874.2, NM 014874.3, NM 001127660.1,

BC017061, BC017061.1, NM 014874.4

UniProt ID: 095140

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 <u>custom shRNA service</u>.





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).