

Product datasheet for TR302878

OriGene Technologies, Inc.

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NSUN3 Human shRNA Plasmid Kit (Locus ID 63899)

Product data:

Product Type: shRNA Plasmids

Product Name: NSUN3 Human shRNA Plasmid Kit (Locus ID 63899)

Locus ID: 63899

Synonyms: MST077; MSTP077

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: NSUN3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

63899). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 022072, NM 022072.1, NM 022072.2, NM 022072.3, NM 022072.4, BC020602,

BC020602.1, BC018432, BC057238, NM 022072.5

UniProt ID: Q9H649

Summary: Mitochondrial tRNA methyltransferase that mediates methylation of cytosine to 5-

methylcytosine (m5C) at position 34 of mt-tRNA(Met) (PubMed:27497299, PubMed:27214402, PubMed:27356879). mt-tRNA(Met) methylation at cytosine(34) takes place at the wobble position of the anticodon and initiates the formation of 5-formylcytosine (f(5)c) at this position (PubMed:27497299, PubMed:27214402, PubMed:27356879). mt-tRNA(Met) containing the f(5)c modification at the wobble position enables recognition of the AUA codon in addition to

the AUG codon, expanding codon recognition in mitochondrial translation (PubMed:27497299, PubMed:27356879).[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 <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).