

# **Product datasheet for TL311361V**

#### OriGene Technologies, Inc.

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## MTHFD2 Human shRNA Lentiviral Particle (Locus ID 10797)

**Product data:** 

**Product Type:** shRNA Lentiviral Particles

**Product Name:** MTHFD2 Human shRNA Lentiviral Particle (Locus ID 10797)

**Locus ID:** 10797

Synonyms: methylenetetrahydrofolate dehydro; methylene tetrahydrofolate dehydrogenase (NAD+

dependent), methenyltetrahydrofolate cyclohydrolase; methylene tetrahydrofolate dehydrogenase 2; NAD-dependent methylene tetrahydrofolate dehydrogenase

cyclohydrolase; NMDMC

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: MTHFD2 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1

scramble control), 0.5 ml each, >10^7 TU/ml.

**RefSeq:** BC015062, NM 001040409, NM 006636, NR 027405, NM 006636.1, NM 006636.2,

NM 006636.3, NM 001040409.1, BC015062.1, BC017054, BC017054.1, BC001548,

NM 006636.4

UniProt ID: P13995

Summary: This gene encodes a nuclear-encoded mitochondrial bifunctional enzyme with

methylenetetrahydrofolate dehydrogenase and methenyltetrahydrofolate cyclohydrolase activities. The enzyme functions as a homodimer and is unique in its absolute requirement for magnesium and inorganic phosphate. Formation of the enzyme-magnesium complex allows binding of NAD. Alternative splicing results in two different transcripts, one protein-coding and the other not protein-coding. This gene has a pseudogene on chromosome 7.

[provided by RefSeq, Mar 2009]

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>.



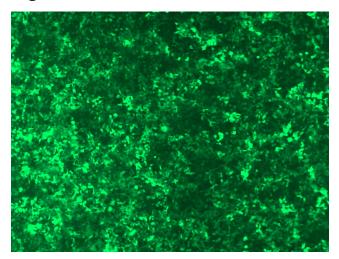


#### Performance Guaranteed:

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.

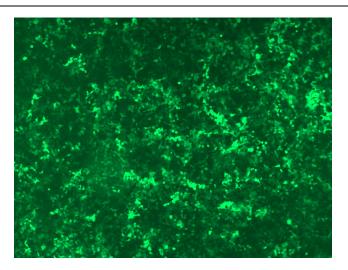
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

## **Product images:**



GFP signal was observed under microscope at 48 hours after transduction of [TL311361C] virus into HEK293 cells. [TL311361C] virus was prepared using lenti-shRNA [TL311361C] and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of [TL311361D] virus into HEK293 cells. [TL311361D] virus was prepared using lenti-shRNA [TL311361D] and [TR30037] packaging kit.