

## Product datasheet for RC203095L3V

## OriGene Technologies, Inc.

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## MTHFD2 (NM\_001040409) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: MTHFD2 (NM 001040409) Human Tagged ORF Clone Lentiviral Particle

Symbol: MTHFD2

Synonyms: methylenetetrahydrofolate dehydro; methylene tetrahydrofolate dehydrogenase (NAD+

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

cyclohydrolase; NMDMC

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

**ACCN:** NM 001040409

ORF Size: 744 bp

**ORF Nucleotide** 

Sequence:

The ORF insert of this clone is exactly the same as(RC203095).

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM 001040409.1</u>, <u>NP 001035499.1</u>

RefSeq Size: 2306 bp
RefSeq ORF: 746 bp
Locus ID: 10797
Cytogenetics: 2p13.1

**Protein Families:** Druggable Genome





## MTHFD2 (NM\_001040409) Human Tagged ORF Clone Lentiviral Particle - RC203095L3V

**Protein Pathways:** Glyoxylate and dicarboxylate metabolism, Metabolic pathways, One carbon pool by folate

**MW:** 26.8 kDa

Gene 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]