## Product datasheet for RC203095L3

OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

## MTHFD2 (NM_001040409) Human Tagged Lenti ORF Clone

## Product data:

Product Type:
Product Name:
Tag:
Symbol:
Synonyms:

Mammalian Cell Selection:

Vector:
E. coli Selection:

ORF Nucleotide Sequence:
Restriction Sites:
Cloning Scheme:

Expression Plasmids
MTHFD2 (NM_001040409) Human Tagged Lenti ORF Clone
Myc-DDK
MTHFD2
methylenetetrahydrofolate dehydro; methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methenyltetrahydrofolate cyclohydrolase; methylene tetrahydrofolate dehydrogenase 2; NAD-dependent methylene tetrahydrofolate dehydrogenase cyclohydrolase; NMDMC
Puromycin
pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Chloramphenicol ( $34 \mathrm{ug} / \mathrm{mL}$ )
The ORF insert of this clone is exactly the same as(RC203095).

Sgfl-Mlul

Cloning sites used for ORF Shuttling:


DDK.Tag
GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TGGGTAG GAAG


* The last codon before the Stop codon of the ORF.

ACCN:
NM_001040409

ORF Size:
OTI Disclaimer:

## OTI Annotation:

Components:

Reconstitution Method:

744 bp
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

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

1. Centrifuge at $5,000 \mathrm{xg}$ for 5 min .
2. Carefully open the tube and add 100 ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000 xg ) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$.
RefSeq: NM 001040409.1 NP 001035499.1
RefSeq Size:
2306 bp
746 bp
10797
2p13.1
Druggable Genome
Glyoxylate and dicarboxylate metabolism, Metabolic pathways, One carbon pool by folate 26.8 kDa

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 proteincoding and the other not protein-coding. This gene has a pseudogene on chromosome 7. [provided by RefSeq, Mar 2009]

## Product images:



