

## Product datasheet for **RC223034**

### **MTHFD1L (NM\_015440) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MTHFD1L (NM_015440) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MTHFD1L
Synonyms:	dJ292B18.2; FTHFSDC1; MTC1THFS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC223034 representing NM\_015440  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

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AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
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**Protein Sequence:** >RC223034 representing NM\_015440  
 Red=Cloning site Green=Tags(s)

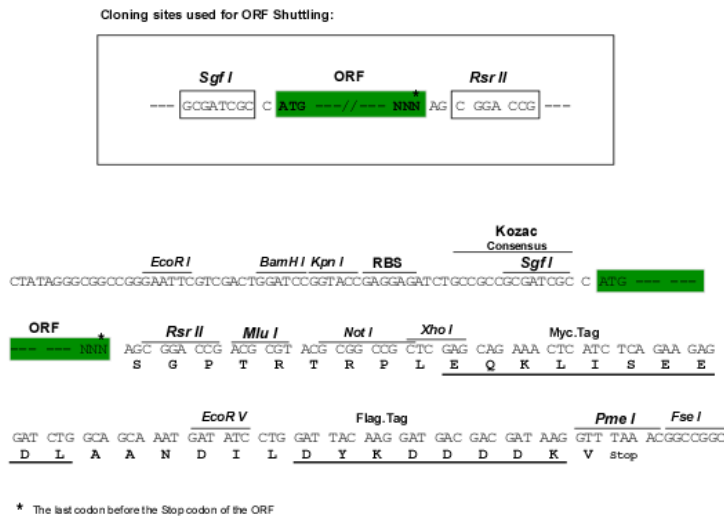
MGTRLPLVLRQLRRPPQPPGPPRRLRVPCRASSGGGGGGGGREGLLQRRPQDQGARSSCSPGGRTPAARDSIVREVIQNSKEVLSLLQEKNPAPFKPVLAI IQAGDDNLMQEIQNLAEEAGLNITHICLPPDSSEAEIIDEILKINEDTRVHGLALQISENLF SNKVLNALKPEKDVDGVT DINL GKLVRGDAHECFVSPVAKAVIELLEKSGVNL DGKILVVGAGHSLEAALQCLFQRKGSMTMSIQWKTRQLQSKLHEADIVVLGSPKPEEIPLTIWQP GTTVLNC SHDFLSGKVGCGSPRIHFGGLIEEDDVILLAAALRIQNMVSSGRRWLREQQHRWRHLHLK LK LQPLSPVPSDIEISRQTPKAVDVLAKEIGLLADEIEIYGKSKAKVRLSVLERLKDQADGKYVLVAGITPTPLGEGKSTVTIGLVQALTAHLNVNSFACL RQPSQGP TF GVKGGAAGGGYAQVIPMEEFNLH LTGDIH AITAANNLLAAAIDTRILHENTQTDKALYNRLVPLVNGVREFSEIQLARLKKLGINKTDPSTL TEEEVSK FARLDIDPSTITWQRVLDTNDRFLRKITIGQGNTKGGHYRQAQFDI AVASEIMAVLAL TDSLADMKARLGRMVVASDKSGQPVTADDLGV TGALTVLMKDAIKPNLMQ TLEGTPVFVHAGPFANIAHGNSSVLADKIALKLVGEEGFVVTEAGFGADIGMEKFFNIKCRASGLVPNVVVLVATVRALKMGGGPSVTAGVPLKKEYTEENIQLVADGCCNLQKQIQITQLFGVPVVVALNVFKTDTRAEIDLVELAKRAGAFDAPCYHWSVGGKGSVDLARAVREAASKRSRFQFLYDVQVPIVDKIRTIAQAVYGAKDIELSPEAQAKIDRYTQQGFNLPICMAKTHLSLSHQDPDKKGVPRDFILPISDV RASIGAGFIYPLVGT MSTMPGLPTRPCFYDIDLDTETE QVKGLF

SGP TRTRRLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8116\\_f07.zip](https://cdn.origene.com/chromatograms/mk8116_f07.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_015440

**ORF Size:** 2934 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

**Components:** 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).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul 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 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_015440.5](#)

**RefSeq Size:** 3613 bp

**RefSeq ORF:** 2937 bp

**Locus ID:** 25902

**UniProt ID:** [Q6UB35](#)

**Cytogenetics:** 6q25.1

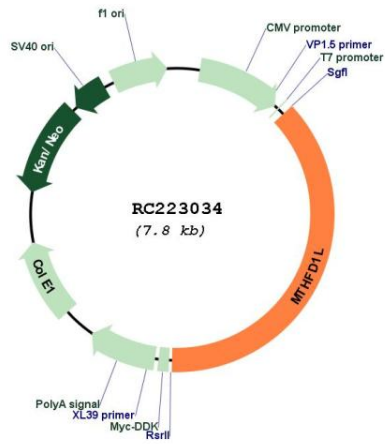
**Domains:** FTHFS

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

**MW:** 105.6 kDa

**Gene Summary:** The protein encoded by this gene is involved in the synthesis of tetrahydrofolate (THF) in the mitochondrion. THF is important in the de novo synthesis of purines and thymidylate and in the regeneration of methionine from homocysteine. Several transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Jun 2011]

Product images:



Circular map for RC223034