

## Product datasheet for **SC331854**

### **MTHFD1L (NM\_001242769) Human Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MTHFD1L (NM\_001242769) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** MTHFD1L  
**Synonyms:** dj292B18.2; FTHFSDC1; MTC1THFS  
**Vector:** pCMV6-Entry (PS100001)  
**Fully Sequenced ORF:** >SC331854 representing NM\_001242769.  
**Blue**=Insert sequence **Red**=Cloning site **Green**=Tag(s)

```
ATGGGCACGCGTCTGCCGCTCGTCCTGCGCCAGCTCCGCCGCCGCCAGCCCCGGGGCCTCCGCGC
CGCCTCCGTGTGCCCTGTGCGCTAGCAGCGGGCGGCGGGAGGCGGGCGGTGGCCGGGAGGGCCTG
CTTGACAGCGGGCGGCCGAGGATGGCCAGGCCGGAGCAGCTGCAGCCCCGGCGCCGAACGCCCGG
GCGCGGGACTCCATCGTCAGAGAAGTCATTAGAATTCAAAGAAGTTCTAAGTTTATTGCAAGAAAA
AACCTGCCTTCAAGCCGGTTCTTGAATTATCCAGGCAGGTGACGACAACCTTGATGCAGGAAATCAAC
CAGAATTTGGCTGAGGAGGCTGGTCTGAACATCACTCACATTTGCCTCCCTCCAGATAGCAGTGAAGCC
GAGATTATAGATGAAATCTTAAAGATCAATGAAGATACCAGAGTACATGGCCTTGCCTTCAGATCTCT
GAGAACTGTTTAGCAACAAAGTCTCAATGCCTTGAACCCAGAAAAAGATGTGGATGGAGTAACAGAC
ATAAACCTGGGGAAGCTGGTGGCAGGGGATGCCCATGAATGTTTTGTTTCACCTGTTGCCAAAGCTGTA
ATTGAACCTTTGAAAAATCAGGTGTCAACCTAGATGGAAAGAAGATTTTGGTAGTGGGGGCCCATGGG
TCTTTGGAAGCTGCTCTACAATGCCTGTCCAGAGAAAAGGTTCCATGACAATGAGCATCCAGTGGAAA
ACACGCCAGCTTCAAAGCAAGACGGAGTCTCGTTCTGTACCAGGCTGGAGTGCAGGCGCGTGATTAG
```

**Restriction Sites:** SgfI-RsrII  
**ACCN:** NM\_001242769  
**Insert Size:** 828 bp  
**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).  
**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\\_001242769.1](#)

**RefSeq Size:** 1072 bp

**RefSeq ORF:** 828 bp

**Locus ID:** 25902

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

**Cytogenetics:** 6q25.1

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

**MW:** 29.8 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]  
Transcript Variant: This variant (4) differs in the 3' UTR and coding sequence and uses an alternate in-frame splice junction at the 5' end of an exon compared to variant 1. The resulting isoform (4) has a shorter and distinct C-terminus and lacks a single internal aa compared to isoform 1. Isoform 4 is thought to lack THF synthase activity.