

## Product datasheet for MR200973

### Mthfs (BC024567) Mouse Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Mthfs (BC024567) Mouse Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Mthfs  
 Synonyms: Gm2382  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >MR200973 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCAAGATGAAGTTGAGACGGAAGTAATCATCAAGGACATTTTCAAACAAGGCAAAATCTGCTTCATCC  
 CTCAGTACCAATCCAGAGCAATCACATGGACATGGTGAGTTAACGTCACCTGAAGAAATTGCTTTACT  
 TCCAAGACATCTTGAATATTCATCAGCCTGGTGAGGGAGATGTTCCGGGAGGAGCCTTATCCACTGGT  
 GGACTTGACCTCATCTTCTTCTGGCCTCGGGTTTGACAAAGATGGCAACCGGCTGGGGCGGGTAAGG  
 GGTACTATGACACCTACCTGAAGCGCTGTGTACAGCATCAGGAAGTGAAGCCCTACACCATGGCTTTGGC  
 TTTTAAAGAGCAGATCTGTCCCCAGATCCCAGTGGATGAGCATGACATGAAGGTAGATGAAGTCCTTTAT  
 GAAGATCCCCAGCATCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR200973 protein sequence  
 Red=Cloning site Green=Tags(s)

MQDEVETEVIKIDIFKQKICFIPQYQFQSNHMDMVRLTSPEEIALPKTWNHQPGEQDVREEALSTG  
 GLDLIFLPLGLGFDKGNRLGRGKGYDYTLKRCVQHVEKPYTMALAFKEQICPQIPVDEHDMKVDVLY  
 EDSPAS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



**Cloning Scheme:**


**ACCN:** BC024567

**ORF Size:** 438 bp

**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.

**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:** [BC024567](#), [AAH24567](#)

**RefSeq Size:** 689 bp

**RefSeq ORF:** 440 bp

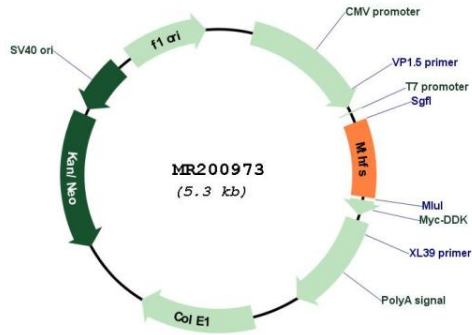
**Locus ID:** 107885

**Cytogenetics:** 9 E3.1

**MW:** 16.7 kDa

**Gene Summary:** Contributes to tetrahydrofolate metabolism. Helps regulate carbon flow through the folate-dependent one-carbon metabolic network that supplies carbon for the biosynthesis of purines, thymidine and amino acids. Catalyzes the irreversible conversion of 5-formyltetrahydrofolate (5-CHO-H(4)PteGlu) to yield 5,10-methenyltetrahydrofolate (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR200973