

Product datasheet for **MR217757**

Mthfr (NM_001161798) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mthfr (NM_001161798) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mthfr
Synonyms:	A1323986
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>MR217757 representing NM_001161798
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAACCATCAAAAAGCCAAGGTCCTCCAGCTGGGCACTGTTATCCATCCCTGGGGATGTGGCCCTCAG
 AGGCTGGCTGCGTGAGGCTTTCTGTGCCACCCTCTATCAGCAGGAATCCAGCCATGGTGAACGAGGCCAG
 AGGAAGTGGCAGTCCCAACCCGCGATCTGAGGGCAGCAGCAGTGGCAGCGAGAGTTCCAAGGACAGTTCA
 AGATGTTCCACCCAGCCTGGACCCAGAGCGGCACGAGAGACTCCGGGAGAAGATGAGGCGCAGAATGG
 ACTCTGGTGACAAGTGGTTCTCCCTGGAGTTCTCCCCCTCGAACTGCTGAGGGAGCTGTTAACCTCAT
 CTCCAGGTTTGACCGGATGGCAGCAGGGGGCCCTCTTCGTAGATGTTACCTGGCACCCAGCTGGAGAC
 CCTGGCTCAGACAAGGAGACCTCTCCATGATGATCGCCAGCACAGCAGTAACTACTGCGGCTTGAAAA
 CCATCCTGCATATGACCTGCTGCCAGCAGCGCCCGGAGGAGATCACAGGCCATCTGCACAGAGCCAAGCA
 GCTGGGCTGAAGAACATAATGGCGCTGAGGGGAGACCCTGTAGGTGACCACTGGGAAGCAGAGGAAGGA
 GGTTCAGCTATGCCACAGACCTGGTGAAGCACATCCGGACCGAGTTTGTGACTATTTTGACATCTGTG
 TGGCAGGTTACCCAGAGGCCACCCGATGCAGAGAGTTCGAGGATGACCTGAAGCATTGGAAGGAGAA
 GGTATCTGCAGGCGCCGACTTCATTACTACTCAGCTCTTCTTTGAGGCCAGCACCTTCTTCAGCTTTGTG
 AAGGCCTGCACAGAGATAGGCATCTCTTGCCTATCCTGCCTGGGATCTTCCCTATTGAGGGCTACACTT
 CCCTTCGGCAGCTTGTAAAAGTGTCCAAGCTGGAGGTGCCACAGAAGATCAAGGATGTAATTGAGCCAT
 CAAAGACAACGATGCTGCCATCCGCAACTACGGCATTGAGCTGGCTGTAGCCTGTGCCGGGAGCTGCTG
 GACAGTGGCTTGGTGCCAGGCCCTCACTTCTATACCCTCAACCGGAGGTGGCCACCATGGAGGTGCTAA
 AGCAACTGGGCATGTGGACCGAGGACCCAGGGCTCCCTTGCCCTGGGCTCTCAGTGCCATCCCAAGCG
 CCGGGAGGAAGATGTCGGTCCCATCTTCTGGGCTCCAGACCAAAGAGCTACATCTACCGCACACAGGAC
 TGGGATGAGTTTCTAACGGCCGCTGGGGTAATTCTTCTCACCAGCCTTTGGGGAGCTGAAAGACTACT
 ACCTCTTCTACCTGAAAAGCAAGTCCCCAGGGAGGAGCTGCTGAAGATGTGGGGCAGGAGCTCACCGAG
 CGAAGAGAGTGTCTTTGAAGTCTTTGAACACTACCTCTCTGGAGAGCCGAATCGCCATGGCTACAGAGTA
 ACCTGCCTGCCCTGGAACGATGAACCCCTGGCAGCGGAAACCAGCCTGATGAAGGAAGAGCTGCTCCGCG
 TGAACAGGCTGGGCATCCTCACCATCAACTCTCAGCCCAACATCAACGAAAACCATCCTCAGACCCTGT
 TGTGGGCTGGGGCCAGTGGGGTTATGTCTTCCAGAAGGCCTACCTCGAATTCTCACCTCCCCTGAA
 ACTGTGGAGGCGCTTCTGCAGGTGCTGAAGACATACGAGCTGCGGGTCAACTACCACATCGTGGACGTGA
 AGGGAGAGAACATCACTAATGCCCTGAGCTGCAGCCCAATGCCGTGACGTGGGGCATCTTCCCGGGTCCG
 AGAGATCATCCAGCCTACTGTGGTGGACCCATCAGCTTCATGTTCTGGAAGGATGAGGCCCTTTGCCCTG
 TGGATCGAGCAGTGGGGCAAGCTATACGAGGAGGAGTCGCCATCCCGCATGATCATCCAATACATCCATG
 ACAACTATTTCTGGTCAACCTGGTGGACAACGAGTTCCTCGTGGACAGCTGCCTGTGGCAGGTGGTGG
 GGACACGTTTGTGCTCAACAGGCATCCACGGAGAGAGACACAGGCTCCA

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR217757 representing NM_001161798
 Red=Cloning site Green=Tags(s)

MNHQKAKVLPAGHCYPSLGMWASEAGCVRLSVPPSISRNPAMVNEARGSGSPNPRSEGSSSGSESSKDSS
 RCSTPSLDPERHERLREKMRRRMDSGDKWFSLEFFPRTAEGAVNLISRFDRMAAGGPLFVDVTWHPAGD
 PGSDKETSSMMIASTAVNYCGLETILHMTCCQQRPEEITGHLHRAKQLGLKNIMALRGDPVGDHWEAEEG
 GFSYATDLVKHIRTEFADYFDICVAGYPRGHPDAESFEDDLKHLKEKVSAGADFIIITQLFFEASTFFSFV
 KACTEIGISCPILPGIFPIQGYTSLRQLVKLSKLEVPQKIKDVIPIKDNDAAIRNYGIELAVSLCRELL
 DSGLVPGLHFYTLNREVATMEVLKQLGMWTEPPRRPLPWALSAHPKRREEDVRPIFWASRPKSYIYRTQD
 WDEFNNGRWGNSSPAFGELKDYYLFYLSKSPREELLKMWGEELTSEESVFEVFEHYLSGEPNRHGYRV
 TCLPWNDEPLAAETSLMKEELLRVNRLGILTINSQPNINAKPSSDPVVGWGPSSGGYVFQKAYLEFFTSTRE
 TVEALLQVLKTYELRVNYHIVDKGENITNAPELQPNVTVGIFPGREIIQPTVVDPI SFMFWKDEAFAL
 WIEQWGLKYEESPSRMIQYIHDNYFLVNLVDNEFPLDSCLVQVVEDTFELLNRHPTERETQAP

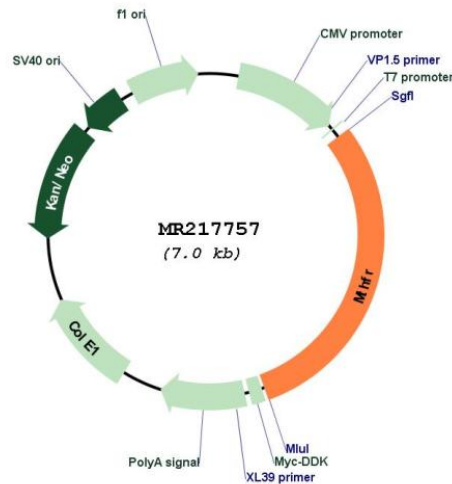
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001161798

ORF Size: 2085 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: [NM_001161798.1](#), [NP_001155270.1](#)

RefSeq Size: 6085 bp

RefSeq ORF:	2088 bp
Locus ID:	17769
Cytogenetics:	4 78.67 cM
MW:	79.4 kDa
Gene Summary:	Catalyzes the conversion of 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate, a co-substrate for homocysteine remethylation to methionine.[UniProtKB/Swiss-Prot Function]