

Product datasheet for **MG209788**

Mthfr (NM_010840) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mthfr (NM_010840) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mthfr
Synonyms:	A1323986
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG209788 representing NM_010840
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGAACGAGGCCAGAGGAAGTGGCAGTCCCAACCCGCGATCTGAGGGCAGCAGCAGTGGCAGCGAGA
GTTCCAAGGACAGTTCAAGATGTTCCACCCAGCCTGGACCCAGAGCGGCACGAGAGACTCCGGGAGAA
GATGAGGCGCAGAATGGACTCTGGTGACAAGTGGTTCTCCTGGAGTTCTTCCCCCTCGAACTGCTGAG
GGAGCTGTAACTCATCTCCAGGTTTGACCGGATGGCAGCAGGGGGCCCCCTTTCGTAGATGTTACCT
GGCAGCCAGCTGGAGACCCTGGCTCAGACAAGGAGACCTCCTCCATGATGATCGCCAGCAGCAGTAA
CTACTGCGGCTTGAAACCATCTGCATATGACCTGCTGCCAGCAGCGCCCGGAGGAGATCACAGGCCAT
CTGCACAGAGCCAAGCAGCTGGGCTGAAGAACATAATGGCGCTGAGGGGAGACCCTGTAGGTGACCACT
GGGAAGCAGAGGAAGGAGGCTTCAGCTATGCCACAGACCTGGTGAAGCACATCCGGACCGAGTTTGCTGA
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TATTCAGGGCTACACTTCCCTTCGGCAGCTTGTAAAAGTGTCAAAGCTGGAGGTGCCACAGAAGTCAAG
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TGTGCCGGGAGCTGCTGGACAGTGGCTTGGTGCCAGGCCCTCCACTTCTATACCCTCAACCGCAGGTTGGC
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AGTGCCGATCCCAAGCGCCGGGAGGAAGATGTCCTGCCATCTTCTGGGCTCCAGACCAAGAGCTACA
TCTACCGCACACAGGACTGGGATGAGTTTCTAACGCGCCGCTGGGGTAATTCTTCTCACCAGCCTTTGG
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GGAAGAGCTGCTCCGCTGAACAGGCTGGGCATCCTCACCATCAACTCTCAGCCCAACATCAACGCAAAA
CCATCCTCAGACCCTGTTGTGGCTGGGGCCCCAGTGGGGTTATGTCTTCCAGAAGGCCTACCTCGAAT
TCTTCACTCCCCTGAACTGTGGAGGCGCTTCTGCAGGTGCTGAAGACATACGAGCTGCGGGTCAACTA
CCACATCGTGGACGTGAAGGGAGAGAACATCACTAATGCCCTGAGCTGCAGCCCAATGCCGTGACGTGG
GGCATCTTCCCGGTGAGAGATCATCCAGCCTACTGTGGTGGACCCATCAGCTTCATGTTCTGGAAGG
ATGAGGCCTTTGCCCTGTGGATCGAGCAGTGGGCAAGCTATACGAGGAGGAGTCGCCATCCCGCATGAT
CATCCAATACATCCATGACAACATTTCTGCTCAACCTGGTGGACAACGAGTTCCCGCTGGACAGCTGC
CTGTGGCAGGTGGTGGAGGACACGTTTGTAGCTGCTCAACAGGCATCCCACGGAGAGAGACACAGGCTC
CA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG209788 representing NM_010840
 Red=Cloning site Green=Tags(s)

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MVNEARGSGSPNPRSEGSSSGSESSKSSRCSTPSLDPERHERLREKMRRRMDSGDKWFSLEFFPPRTAE
GAVNLIISRFDRMAAGGPLFVDVTWHPAGDPGSDKETSSMMIASTAVNYCGLETILHMTCCQRPPEITGH
LHRAKQLGLKNIMALRGDPVGDHWEAEEGGFSYATDLVKHIRTEFADYFDICVAGYPRGHPDAESFEDDL
KHLKEKVSAGADFIIITQLFFEASTFFSVKACTEIGISCPILPGIFPIQGYTSLRQLVKLSKLEVPQKIK
DVIEPIKNDAAIRNYGIELAVSLCRELLDSSLVPLGHFYTLNREVATMEVLKQLGMWTEPPRRPLPWAL
SAHPKRREEDVRPIFWASRPKSYIYRTQDWDFPNRGNWSSSPAFGELKDYYLFYKSKSPREELLKMW
GEELTSEESVFEVFEHYLSGEPNRHGYRVTCLPWNDEPLAAETSLMKEELLRVNRLGILTINSQPNINAK
PSSDPVVGWGPSGGYVFQKAYLEFFTSRETVEALLQVLKTYELRVNYHIVIDVKGENITNAPELQPNAVTW
GIFPGREIIQPTVVDPIISFMFWKDEAFALWIEQWGKLYEEESPSRMIQYIHDNYFLVNLVDNEFPLDSC
LWQVVEDTFELLNRHPTERETQAP
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_010840

ORF Size: 1962 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_010840.3](#), [NP_034970.2](#)

RefSeq Size: 6008 bp

RefSeq ORF: 1965 bp

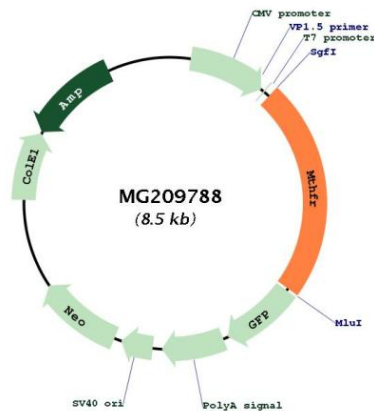
Locus ID: 17769

UniProt ID: [Q9WU20](#)

Cytogenetics: 4 78.67 cM

Gene Summary: Catalyzes the conversion of 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate, a co-substrate for homocysteine remethylation to methionine.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG209788