

Product datasheet for **SC125935**

MTHFR (NM_005957) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTHFR (NM_005957) Human Untagged Clone
Tag:	Tag Free
Symbol:	MTHFR
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<p>>OriGene sequence for NM_005957 edited</p> <pre> CCGGCGCCGAGCGTTCTGAGTCAACCCGGGACTGGAGGTAGGAACCCAGCCATGGTGAAC GAAGCCAGAGGAAACAGCAGCCTCAACCCCTGCTTGGAGGGCAGTGCCAGCAGTGCCAGT GAGAGCTCCAAAGATAGTTTCGAGATGTTCCACCCCGGGCCTGGACCCTGAGCGGCATGAG AGACTCCGGGAGAAGATGAGGCGCGATTGGAATCTGGTGACAAGTGGTTCTCCCTGGAA TTCTTCCCTCCTCGAACTGCTGAGGGAGCTGTCAATCTCATCTCAAGTTTGACCGGATG GCAGCAGGTGGCCCCCTACATAGACGTGACCTGGCACCCAGCAGGTGACCCTGGCTCA GACAAGGAGACCTCCTCCATGATGATCGCCAGCACCCGCGTGAACACTGTGGCTGGAG ACCATCCTGCACATGACCTGTGCCGTGAGCGCCTGGAGGAGATCACGGGCCATCTGCAC AAAGCTAAGCAGCTGGCCTGAAGAACATCATGGCGCTGCGGGGAGACCAATAGGTGAC CAGTGGGAAGAGGAGGAGGGAGGCTTCAACTACGCACTGGAGCTGGTGAAGCACATCCGA AGTGAGTTTGGTACTACTTTGACATCTGTGTGGCAGGTTACCCCAAAGGCCACCCCGAA GCAGGGAGCTTTGAGGCTGACCTGAAGCACTTGAAGGAGAAGGTGTCTGCGGGAGCCGAT TTCATCATCACGAGCTTTTCTTTGAGGCTGACACATTCTCCGCTTTGTGAAGGCATGC ACCGACATGGGCATCACTTGCCCCATCGTCCCCGGGATCTTCCCATCCAGGGCTACCAC TCCCTTCGGCAGCTTGTGAAGCTGTCCAAGCTGGAGGTGCCACAGGAGATCAAGGACGTG ATTGAGCCAATCAAAGACAACGATGCTGCCATCCGCAACTATGGCATCGAGCTGGCCGTG AGCCTGTGCCAGGAGCTTCTGGCCAGTGGCTTGGTGCCAGGCCTCCACTTCTACACCCTC AACCGCGAGATGGCTACCACAGAGGTGCTGAAGCGCCTGGGGATGTGGACTGAGGACCCC AGGCGTCCCCTACCCTGGGCTCTCAGTGCCACCCCAAGCGCCGAGAGGAAGATGTACGT CCCATCTTCTGGGCTCCAGACCAAGAGTTACATCTACCGTACCCAGGAGTGGGACGAG TTCCCTAACGGCCGCTGGGGCAATTCTCTTCCCCTGCCTTTGGGGAGCTGAAGGACTAC TACCTCTTCTACCTGAAGAGCAAGTCCCCCAAGGAGGAGCTGCTGAAGATGTGGGGGGAG GAGCTGACCAGTGAAGCAAGTGTCTTTGAAGTCTTTGTTCTTTACCTCTCGGGAGAACCA AACCGAATGGTCACAAAGTGACTTGCCTGCCCTGGAACGATGAGCCCCCTGGCGGCTGAG ACCAGCCTGCTGAAGGAGGAGCTGCTGCGGGTGAACCGCCAGGGCATCCTCACCATCAAC TCACAGCCCAACATCAACGGGAAGCCCTCCTCCGACCCCATCGTGGGCTGGGGCCCCGAGC GGGGGCTATGTCTTCCAGAAGGCTACTTACAGTCTTCACTTCCGCGAGACAGCGGAA GCACTTCTGCAAGTGTGAAGAAGTACGAGCTCCGGGTTAATTACCACCTTGTCAATGTG </pre>



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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_005957 unedited
NGGGTCAGATTTTGTATACGACTCATATAGGCGGCGCGCAATTCGCACGAGGCCGGCGG
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CATGGGCATCACTTGGCCATCGTCCCGGGATCTTTTCCATNCAGGGCTACACTCCCTT
TCGCAGCTGG

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Restriction Sites:

Please inquire

ACCN:

NM_005957

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_005957.2](#), [NP_005948.2](#)

RefSeq Size: 6099 bp

RefSeq ORF: 1971 bp

Locus ID: 4524

UniProt ID: [P42898](#)

Cytogenetics: 1p36.22

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Methane metabolism, One carbon pool by folate

Gene Summary: The protein encoded by this gene catalyzes the conversion of 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate, a co-substrate for homocysteine remethylation to methionine. Genetic variation in this gene influences susceptibility to occlusive vascular disease, neural tube defects, colon cancer and acute leukemia, and mutations in this gene are associated with methylenetetrahydrofolate reductase deficiency.[provided by RefSeq, Oct 2009]
Transcript Variant: This variant (2) differs in the 5' UTR and coding sequence compared to variant 1. The resulting isoform (2) is shorter at the N-terminus compared to isoform 1.
Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.