

## Product datasheet for **SC120001**

### Methylmalonyl Coenzyme A mutase (MUT) (NM\_000255) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Methylmalonyl Coenzyme A mutase (MUT) (NM_000255) Human Untagged Clone
Tag:	Tag Free
Symbol:	Methylmalonyl Coenzyme A mutase
Synonyms:	MCM; MUT
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC120001 sequence for NM\_000255 edited (data generated by NextGen Sequencing)

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ATGTTAAGAGCTAAGAATCAGCTTTTTTACTTTACCTCATTACCTGAGGCAGGTAAAA
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Clone variation with respect to NM\_000255.3

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_000255 unedited</p> <pre>TGAAACACGACTTACTATAGGGCGGCCGGAATTCGGCACGAGGCAGAGTCGTCCGGCTG ACGCTGGCGGTGGCGCGGTTTGTGTGGGCTTGGTGAGGGCGGGGAGGCCTGGCTGTGTGG ATGTCTGACAGGTGAGGCGGGGACGCAGAAGTCAGCCGCCCTCTCCACAGCGGAGTC CAAAACAGGCCTACCAGTCAGTTCTTATTTCTATTGGGTGTTCCATGCTCCACCATGTT AAGAGCTAAGAATCAGCTTTTTTACTTTTACCTCATTACCTGAGGCAGGTAAGAATC ATCAGGCTCCAGGCTCATACAGCAACGACTTCTACACCAGCAACAGCCCCTTACCCAGA ATGGGCTGCCCTGGCTAAAAAGCAGCTGAAAGGCAAAAACCCAGAAGACCTAATATGGCA CACCCCGAAGGGATCTCTATAAAAACCTTGTATTCCAAGAGAGATACTATGGACTTACC TGAAGAACTTCCAGGAGTGAAGCCATTCACACGTGGACCATATCTACCATGTATACCTT TAGGCCCTGGACCATCCGCCAGTATGCTGGTTTTAGTACTGTGGAAGAAAGCAATAAGTT CTATAAGGACAACATTAAGGCTGGTCAGCAGGGATTATCAGTTGCCTTTGATCTGGCGAC ACATCGTGGCTATGATTCAGACAACCCTCGAGTTCGTGGTGATGTTGGAATGGCTGGAGT TGCTATTGACACTGTGGAAGATACAAAATTCTTTTTGATGGAATTCCTTANAAAAAAT GTCAGTTTCCATGACTATGAAATGGAGCAGTATCCAGTTCTTGCAAATNTATAGTAAC TGGAGAAGAACAAGGTGTACCTAAAGAGAGCTTACTGGTACCATNCANATGAATACTNAA GGATT</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_000255 unedited</p> <pre>TGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGAAGTGAAGTGTAT GTACATACTTATAGCATGACACCAGGCCTATAAGTAAGTATTTTAAAGTAAAGCTTTCA AGGAAAGTACAAATCAGGTATTGAAATTAATTGAAGACATAGCTTTACTCTCTCTTTG ATCATAACTAAAATAATATTTTAGACAAAAGCTAAAACAAAAAGAGGATATTATACAGAT TGCTGCTCTTTTTCCAAACACTTCTCAATATCATCAAGCACCTGAACGGCAGCCTTTGGA ATTCGAGTCCCAGGACCAATACATTGGAAACCAACTTCAAACAGAAATTCATAATCC TGAGGTGGTATCACCCCTCCACACATGACAAGAATATCTGGCCGTCCAAGGGAGTTAAGT TCTTTGATGAGTTCAGGAACTAGGGTTTTATGACCAGCAGCGAGGGTGCTTATGCCACA GCATGCACATCCGCATCCACAGCCTGCTGGGCCACTTACGAGGAGTCTGGAAAAGAGGG CCTATGTCCACATCAAACCAAGATCAGCAAATCCTGTAGCAATAACTTTTGCTCCTCG TCAATGGCCATCTTGTCCTTTTTGCTACAAGAAGACGAGGTCTGCGACCTTACGTTCC ATGAATTTTATGAACCTCTTGATAGCAGATGTTATCTCTTTACTTTCTCCAAATTCCTGG CGATATGCTCCACTACCATTTCGATCATTTCGCTTTATGTTACCAAAATACCTTTTTCAGG GCATCTGTGATTTCTCCACTGTACATCTTGCCCGAGATGCATCCACTTGCAGAGCCAAGA TTTTCCATCTCCGCTACCACCACATCCCCTTATTGCGAGCAAGACAACGTTTCAGCCAAGCT TGATCCCTGCTGAAT</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_000255
<b>Insert Size:</b>	2710 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_000255.1</a> , <a href="#">NP_000246.1</a>
<b>RefSeq Size:</b>	2798 bp
<b>RefSeq ORF:</b>	2253 bp
<b>Locus ID:</b>	4594
<b>UniProt ID:</b>	<a href="#">P22033</a>
<b>Cytogenetics:</b>	6p12.3
<b>Domains:</b>	MM_CoA_mutase, B12-binding
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Propanoate metabolism, Valine, leucine and isoleucine degradation
<b>Gene Summary:</b>	This gene encodes the mitochondrial enzyme methylmalonyl Coenzyme A mutase. In humans, the product of this gene is a vitamin B12-dependent enzyme which catalyzes the isomerization of methylmalonyl-CoA to succinyl-CoA, while in other species this enzyme may have different functions. Mutations in this gene may lead to various types of methylmalonic aciduria. [provided by RefSeq, Jul 2008]