

## Product datasheet for **SC128266**

### MLYCD (NM\_012213) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MLYCD (NM_012213) Human Untagged Clone
Tag:	Tag Free
Symbol:	MLYCD
Synonyms:	MCD
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_012213 edited  
 ATGCGAGGCTTCGGGCCAGGCTTGACGGCCAGGCGTCTCCTCCCGCTGCGGTTGCCCCCG  
 CGGCCGCGCCGGGCCCGGCTGGCGAGCGGGCAGGCGCCGGCGCCCTGGAGCGGGCCATG  
 GACGAGCTGCTGCGCCGCGGGTCCCGCCGACGCGGCCCTACGAGCTGCGCGAGAAGACA  
 CCGGCGCCCGCCGAGGGTCAGTGCAGGACTTCGTGAGCTTCTACGGTGGGCTGGCCGAG  
 ACGGCCAGCGGGCCGAAGTGTGGGCCGCTGGCGGGGGCTTCGGCGTGGACCACGGC  
 CAGGTGGCGGAGCAGAGCGCCGGCTGCTCCATCTGCGCCAGCAGCAGCGGGAGGCGGG  
 GTGCTGCTGCAGGCCGAGGACCGGCTGCGCTACGCGCTGGTCCCGGCTATCGCGGCTC  
 TTCCACCACATCAGCAAGCTGGGCGCGGGCTGCGCTTCTGGTGCAGCTGCGGGCCGAC  
 CTGCTGGAGGCGCAGGCCCTCAAGCTGGTGGAGGGCCGGACGTCGGGAAATGAATGGG  
 GTGCTGAAAGGAATGCTCTCAGAATGGTTTTCTCCGGGTTCTGAACCTAGAACGGGTT  
 ACCTGGCATTACCGTGTGAAGTCTTCAGAAAATCAGTGAAGGCTGAGGCTGTGCATCCT  
 GTAAAAAACTGGATGGACATGAAGCGCCGCTGGGCCCTACAGAAGGTGTTACTTCTTT  
 TCTCACTGTTTCGACCCCTGGGGAGCCCTGGTCTGTTTTGCACGTGGCACTGACTGGTGAC  
 ATCTCCAGCAACATCCAGGCAATCGTGAAGGAACATCCTCCATCAGAAACAGAAGAGAAG  
 AACAAAATCACTGCTGCGATCTTTTATCCATCAGCTTGACCCAGCAGGGACTCCAAGGG  
 GTGGAGCTGGGAACATTCCTCATAAAGCGAGTCGTCAAGGAGTTGCAGAGAGAGTTTCT  
 CACCTTGGGGTGTTCAGTCTGTACCTATACTGGTTTACCAAATGGCTTCTGGGG  
 CTTCTGAACTCGAAACGAAGGAGCATGGGAGGAATGAACTCTTACAGATTCCGGAATGT  
 AAGGAAAATCTCGAGATCACAGGTGGCCCATTAACGAGACCCTCAAGCTCCTCCTCAGC  
 AGCAGCGAGTGGGTGCACTCGGAGAAGCTGGTGCGGGCGCTGCAGACTCCGCTGATGAGG  
 CTGTGCGCTGGTACCTGTATGGAGAGAAGCACCGCGGCTACGCGCTGAACCCCGTGGCC  
 AACTTCCACCTGCAGAACGGGGCGGTGCTGTGGCGCATCAACTGGATGGCGGATGTGAGC  
 CTCAGAGGCATCACCGGCTCCTGCGGCTGATGGCCAACACCGCTACTTCTGGAGGAG  
 ACGGGCCCAACAGCACCTCCTACCTCGGCTCCAAGATCATCAAAGCCTCTGAGCAGGTC  
 CTCAGCCTAGTGGCCAGTTTCAAAGAACAGCAAGCTCTGA



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_012213 unedited            NTTTTTGGGNGGCGTTANCAATTTGTTATACCACTTACTATAGGCGGCCGCGACTTCATGC            GAGGCTTCGGGCCAGGCTTGACGGCCAGGCGTCTCCTCCCCTGCGGTTGCCCCGCGGC            CGCCCCGGCCCCGGCTGGCGAGCGGGCAGGCGGCCGCGCCCTGGAGCGGGCCATGGACG            AGCTGTGCGCCGCGGTGCCGCCGACCCGCTACGAGCTGCGCGAGAAGACACCGG            CGCCCCCGGAGGGTCAGTGGCGGACTTCGTGAGCTTCTACGGTGGGCTGGCCGAGACGG            CCCAGCGGGCCGAACCTGCTGGGCCGCTGGCGCGGGGCTTCGGCGTGGACCACGGCCAGG            TGGCGGAGCAGAGCGCCGCGTGCATCTGCGCCAGCAGCAGCGGGAGGCGCGGTGC            TGCTGCANGCCGAGGACCGGCTGCGCTACGCGCTGGTGCCTGCTATCGCGGCTCTTCC            ACCACATCANCAAGCTGGGCGGGCGTGCCTTCTGGTGCAGCTGCGGGCCGACCTGC            TGGAGGCGCAGGCCCTCAAGCTGGTGGAGGGCCCCGGACGTCCGAAAATGATGGNGTGC            TGAAAGGAATGCTCTCAGAAGGGTTTCCCTCCGGTTTCTGAACCTAGNACGGGTACCT            GGCATTACCGTGGTGTGCTTCAAAAATCAGTGAGGCTGAGGCTGGGCATCCCTGTA            AAAAAGTGGTGGACATGAAACCCCGTGGGCCCTACAAAAGTGTACCTTCTTTCTCA            CTGTTCCAGCCCTGGGAGCCCTGGTCTTTTACTGTGCTGAATTGGGGAATTTGAGA            AAATTCAGCATATGGGAAGAACCTCCTCCTTCAAACGGAAAAAATAATCCCGG</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;Reverse primer walk for NM_012213 unedited            CCCTGGGTGCTGTACGCCCAGTGTGAGGAAATTGAGGCCTGGCCTCACGTGTGGACCGG            CTGCGGGACAAGAACACAGTCAACTTTGGCTTTGCTTGGAAAGCTGCTTACAGATACATAA            CTCCCGGCCCTCCTGAAAATGATCGTTTTCTTAGCCGGGGCCCTGTGCTTTAGGAGAGG            TTTACTGTACAGACTTGTGTTCTTTGAAACTGGCCACTAGGCTGAGGACCTGCTCAG            AGGCTTTGATGATCTTGGAGCCAGGTAGGAGGTGCTGTTGGGGCCCGTCTCCTCCAGGA            AGTAGCGGTAGTTGGCCATCAGGCCGAGGAGCCGGTGTGCCTCTGAGGCTCACATCCG            CCATCCAGTTGATGCGCCACAGCACCGCCCGTTCGACGGTGAAGTTGGCCACGGGGT            TCAGCGCGTAGCCGCGGTGCTTCTCCATACAGGTACCAGGCGCACAGCCTCATCAGCG            GAGTCTGCAGCGCCCGCACACAGCTTCTCCGACTGCACCCACTCGCTGCTGCTGAGGAGGA            GCTTGGAGGTCTCGTTAATGGGGCCACCTGTGATCTCCGAGATTTCTTACATTCGGAAT            CTGTAAGAGTTCATTCTCCATGCTCCTTCGTTTGGAGTTTCAAAGCCCCAGAAGCC            ATTTGGTAAAACAGGTATAGGTGACAGACTTGAACACCCCAAGGTGAGGAACTCTC            TCTGNCACTCCTTGACGACTCGTTTATGAGGAATGTTCCAGCTCCACCCCTTGGAGTC            CCTGCTGGGTCAAGCTGATGGAATAAAAGATCGCAGCAGNGATTTTGTTCCTCCCCTCCT            GTTCTGAGGGAAGATGTTCTTACGATGCCTGGATGTTGCTGGAGATGTACCATCAGT            GCCCGTGCAAC</p>
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_012213
<b>Insert Size:</b>	2400 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>	<u>NM_012213.2, NP_036345.2</u>
<b>RefSeq Size:</b>	2211 bp
<b>RefSeq ORF:</b>	1482 bp
<b>Locus ID:</b>	23417
<b>UniProt ID:</b>	<u>O95822</u>
<b>Cytogenetics:</b>	16q23.3
<b>Domains:</b>	MCD
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	beta-Alanine metabolism, Metabolic pathways, Propanoate metabolism
<b>Gene Summary:</b>	The product of this gene catalyzes the breakdown of malonyl-CoA to acetyl-CoA and carbon dioxide. Malonyl-CoA is an intermediate in fatty acid biosynthesis, and also inhibits the transport of fatty acyl CoAs into mitochondria. Consequently, the encoded protein acts to increase the rate of fatty acid oxidation. It is found in mitochondria, peroxisomes, and the cytoplasm. Mutations in this gene result in malonyl-CoA decarboxylase deficiency. [provided by RefSeq, Jul 2008]