

Product datasheet for **RG208587**

MLYCD (NM_012213) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MLYCD (NM_012213) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MLYCD
Synonyms:	MCD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG208587 representing NM_012213
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCGAGGCTTCGGCCAGGCTTACGCGCCAGGCGTCTCTCCCGCTGCGGTTGCCCGCGGCCGCCCCG
 GGCCCGGCTGGCGAGCGGGCAGGCGGCCGCGCCCTGGAGCGGGCCATGGACGAGCTGCTGCGCCGCGC
 GGTGCCGCCGACCGCGCTACGAGCTGCGCGAGAAGACACCGCGCGCCCGCAGGGTCACTGCGCGGAC
 TTCGTGAGCTTCTACGGTGGGCTGGCCGAGACGGCCAGCGGGCCGAAGTCTGGGCCGCTGGCGCGG
 GCTTCGGCGTGGACCACGGCCAGGTGGCGGAGCAGAGCGCGCGTGTCCATCTGCGCCAGCAGCAGCG
 GGAGGCGCGGTGCTGCTGCAGGCCGAGGACCGGCTGCGCTACGCGTGGTGCCGCGCTATCGCGGCTC
 TTCACCACATCAGCAAGCTGGACGGCGCGTGCCTTCTGGTGCAGCTGCGGGCCGACCTGCTGGAGG
 CGCAGGCCCTCAAGCTGGTGGAGGGCCGACGTCGGGAAATGAATGGGGTGTGAAAGGAATGCTCTC
 AGAATGGTTTTCTCCGGTTCTGAACCTAGAACGGGTTACCTGGCATTACCGTGTGAAGTGCTTCAG
 AAAATCAGTGAGGCTGAGGCTGTGCATCTGTAAAAAAGTGGATGGACATGAAGCGCCGCTGGGCCCT
 ACAGAAGGTGTTACTTCTTTCTCACTGTTTCGACCCCTGGGGAGCCCTGGTCTGTTTTGCAGTGGCACT
 GACTGGTGACATCTCCAGCAACATCCAGGCAATCGTGAAGGAACATCCTCCATCAGAAACAGAAGAGAAG
 AACAAAATCACTGCTGCGATCTTTTATCCATCAGCTTACCCAGCAGGGACTCCAAGGGGTGGAGCTGG
 GAACATTCCTCATAAAGCGAGTCGTCAAGGAGTTGCAGAGAGAGTTTCTCACCTGGGGTGTTCGAG
 TCTGTCACCTATACCTGGTTTACCAAAATGGCTTCTGGGCTTCTGAACTCGAAACGAAGGAGCATGGG
 AGGAATGAACTCTTTACAGATTCGGAATGTAAGGAAATCTCGGAGATCACAGGTGGCCCCATTAACGAGA
 CCCTCAAGCTCCTCCTCAGCAGCAGGAGTGGTGCAGTCGAGAGAAGCTGGTGGCGCGCTGCAGACTCC
 GCTGATGAGGCTGTGCCCTGGTACCTGTATGGAGAGAAGCACCAGCGCTACGCGCTGAACCCCGTGGCC
 AACTTCCACCTGCAGAACGGGGCGGTGCTGTGGCGCATCAACTGGATGGCGGATGTGAGCCTCAGAGGCA
 TCACCGGCTCCTGCGGCTGATGGCCAACCTACCCTACTTCTGGAGGAGACGGGCCCAACAGCACCTC
 CTACCTCGGCTCCAAGATCATCAAAGCCTCTGAGCAGGTCCTCAGCCTAGTGGCCAGTTTCAAAGAAC
 AGCAAGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG208587 representing NM_012213
 Red=Cloning site Green=Tags(s)

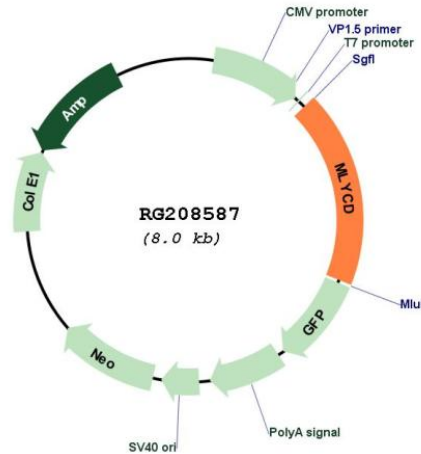
MRGFGPGLTARRLLPLRLPPRPPGPRLASGQAAGALERAMDELLRRAVPPTPAYELREKTPAPAEGQCAD
 FVSFYGLAETAQRAELLGRLARGFGVDHGQVAEQSAGVLHLRQQQREAAVLLQAEDRLRYALVPRYRGL
 FHHSIKLDGGVRFVLQLRADLLEAQLKLVGPDVREMNGVLKGMLEWFSGFLNLERVTWHSPCEVLQ
 KISEAEAVHPVKNWMDMKRRVGPYRRCYFFSHCSTPGEPLVVLHVALTGDISSNIQAIVKEHPPSETEEG
 NKITAAIFYSISLTQQGLQGVELGTFLIKRVVKELQREFPHLGVFSSLSPIPGFTKWLGLLNSQTKEHG
 RNELFTDSECKEISEITGGPINETLKLSSSEWVQSEKLVRALQTPMLRLCAWYLYGEKHRGYALNPVA
 NFHLQNGAVLWRINWMADVSLRGITGSCGLMANYRYFLEETGPNSTSYLGSKIIKASEQVLSLVAQFQKN
 SKL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Plasmid Map:



ACCN: NM_012213

ORF Size: 1479 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:	<ol style="list-style-type: none">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_012213.3
RefSeq Size:	2211 bp
RefSeq ORF:	1482 bp
Locus ID:	23417
UniProt ID:	O95822
Cytogenetics:	16q23.3
Domains:	MCD
Protein Families:	Druggable Genome
Protein Pathways:	beta-Alanine metabolism, Metabolic pathways, Propanoate metabolism
Gene Summary:	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]