

Product datasheet for **RG200909**

MCCC1 (NM_020166) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCCC1 (NM_020166) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MCCC1
Synonyms:	MCC-B; MCCA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG200909 representing NM_020166
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCGCCCTCTGCGGTGTCGGTGCTGCTGGTGGCGGCGGAGAGGAACCGGTGGCATCGTCTCCCGA
GCCTGCTCCTGCCGCGAGGACATGGGTGTGGAGGCAAAGAACCATGAAGTACACAACAGCCACAGGAAG
AAACATTACCAAGTCTCTATTGCAAACAGAGGAGAAATTGCCTGCAGGGTGATGCGCACAGCCAAAAA
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AAGCATATTCATCGCCCCGCTCCCTCCAGCAGAGCTACCTATCTATGGAGAAATCATTCAAGTGGC
CAAGACCTCTGCTGCACAGGCTATCCATCCAGGATGCGGTTTTCTTTAGAAAACATGGAATTTGCTGAA
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AAGCTAAGAAGTCTTCAATGATGATGCTATGCTGATCGAGAAGTTTGTAGACACACCGAGGCATGTAGA
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CGCAAGGAGACGAAGTTTCCGTGCATTATGACCCCATGATTGCGAAGCTGGTCGTGGGCAGCAGATC
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ATTCCAGTCCCCAAATACTTATCTTCTGTGAGCTCACAAGAACTCAGGGCGGCCCTTAGCTCCTATGA
CTGGAACCATGAAAAGTGTGTTGTCAAAGCTGGAGACAAAGTGAAGCGGGGAGATTCCTCATGGTTAT
GATCGCCATGAAGATGGAGCATACCATAAAGTCTCAAAGGATGGCACAGTAAAGAAAGTGTCTACAGA
GAAGGTGCTCAGGCCAACAGACACACTCTTTAGTCGAGTTTGGAGGGAAGAATCAGACAAAAGGGAAT
CGGAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG200909 representing NM_020166
 Red=Cloning site Green=Tags(s)

MAAASAVSVLLVAAERNRWHRLPSLLLPPRTWVWRQRTMKYTTATGRNITKVLIANRGEIACRVMRTAKK
 LGVQTVAVYSEADRNSMHVDMDEAYSIGPAPSQQSYLSMEKIIQVAKTSAAQAIHPGCGFLSENMEFAE
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 GGKGMRIVRSEQEFQEQLSARREAKKSFNDAMLIEKFVDTPRHVEVQVFGDHHGNAVYLFERDCSVQR
 RHQKIIIEEAPAPGIKSEVRKKLGEAAVRAAKAVNYVVGAGTVEFIMDSKHNF CFMEMNTRLQVEHPVTEMI
 TGTDLVEWQLRIAAGEKIPLSQEEITLQGHAFEARIIYAEDPSNNFMPVAGPLVHLSTPRADPSTRIETGV
 RQGDEVSVHYDPMIAKL VVWAADRQAALTKLRYSLRQYNI VGLPTNIDFLLNL SGHPEFEAGNVHTDFIP
 QHHKQLLLSRKAAAKESLCQAALGLILKEKAMTDTFTLQAHQDFSPFSSSSGRRLNISYTRNMTLKDGN
 NVAIAVTYNHDGSYSMQIEDKTFQVLGNLYSEGDC TYLKCSVNGVASKAKLIILENTIYLF SKEGSIEID
 IPVPKYLVSSVSSQETQGGPLAPMTGTIEKVFVKAGDKVKAGDSLMMVIAMKMEHTIKSPKDGTVKKVFYR
 EGAQANRHTPLVEFEESDKRESE

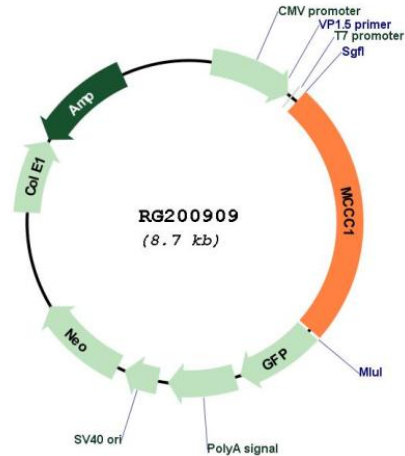
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_020166

ORF Size: 2175 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.

RefSeq: [NM_020166.2](#), [NP_064551.2](#)

RefSeq Size: 2551 bp

RefSeq ORF: 2178 bp

Locus ID: 56922

UniProt ID:	<u>Q96RQ3</u>
Cytogenetics:	3q27.1
Domains:	biotin_lipoyl, CPSase_L_D2, CPSase_L_chain, Biotin_carb_C
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Valine, leucine and isoleucine degradation
Gene Summary:	<p>This gene encodes the large subunit of 3-methylcrotonyl-CoA carboxylase. This enzyme functions as a heterodimer and catalyzes the carboxylation of 3-methylcrotonyl-CoA to form 3-methylglutaconyl-CoA. Mutations in this gene are associated with 3-Methylcrotonylglycinuria, an autosomal recessive disorder of leucine catabolism. [provided by RefSeq, Jul 2008]</p>