

## Product datasheet for **RG229163**

### CCDC109B (MCUB) (NM\_017918) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CCDC109B (MCUB) (NM_017918) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MCUB
Synonyms:	CCDC109B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG229163 representing NM_017918 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTCCAGAGGGGCTCTGGCGTGCCGACGCGGCTGCTGCCGACCCCTGGCACCTGGCGCCAGCGC  
GCCCGTGGCCGCTGCCGCTCCGCCAGGTTTTCGCGTGAAGCTGTGTGAAATGTGAAATACTACCA  
GTCACACCATTATAGTACCGTGGTCCACCTGATGAAATAACAGTTATTTATAGACATGGCCTTCCCTTG  
GTAACACTTACCTTGCCATCTAGAAAAGAAGCTTGTCAATTCGTAGTCAAACCAATGTTGTCAACAGTTG  
GTTCAATCCTTCAGGACCTACAAAATGAAGATAAGGGTATCAAACCTGCAGCCATCTTCACAGCAGATGG  
CAACATGATTTACGCTTCTACCTTGATGGATATTTGCTAATGAATGATTTTAAACTTGTCAATAATAAA  
ATAGCATATGATGTGCAGTGTCCAAAGAGAGAAAAACCAAGTAATGAGCACACTGCTGAGATGGAACACA  
TGAAATCTTTGGTTCACAGACTATTTACAATCTTGCAATTTAGAAGAGTCTCAGAAAAAGAGAGACCA  
TTTACTGGAGAAAATTGACCACCTGAAGGAACAGCTGCAGCCCTTGAACAGGTGAAAGCTGGAATAGAA  
GCTCATTCCGAAGCCAAAACAGTGGACTCCTGTGGGCTGGATTGGCACTGCTGTCCATTCAGGGTGGG  
CACTGGCCTGGCTCACGTGGTGGTGTACTCCTGGGATATCATGGAGCCAGTTACATACTTATCACATT  
TGCAAATTCATGGTCTTTTTGCATACTTTATAGTCACTCGACAGGATTATACTTACTCAGCTGTTAAG  
AGTAGGCAATTTCTCAGTCTTCCACAAGAAATCAAAGCAACAGCACTTTGATGTGCAGCAATACAACA  
AGTTAAAAGAAGACCTTGCTAAGGCTAAAGAATCCCTGAAACAGGCGCGTCATTCTCTGTTTGCAAAAT  
GCAAGTAGAAGAACTCAATGAAAAGAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG229163 representing NM\_017918  
 Red=Cloning site Green=Tags(s)

MLQRGLWPWRTRLLPTPGTWRPARPWPLPPPPQVLRVKLCGNVKKYQSHHYSTVVPPEITVIYRHGLPL  
 VTLTLPSRKERCQFVVKPMLSTVGSFLQDLQNEKDGKIKTAAIFTADGNMISASTLMDILLMDFKLVINK  
 IAYDVQCPKREKPSNEHTAEMEHMKS LVHRLFTILHLEESQKKREHLLLEKIDHLKEQLQPLEQVKAGIE  
 AHSEAKTSGLLWAGLALLSIQGGALAWL TWWVYSWDIMEPVTYFITFANSMVFFAYFIVTRQDYTYSAVK  
 SRQFLQFFHKSKQHFQYQYKLNKEDLAKAKESLQARHSLCCLQMVEELNEKN

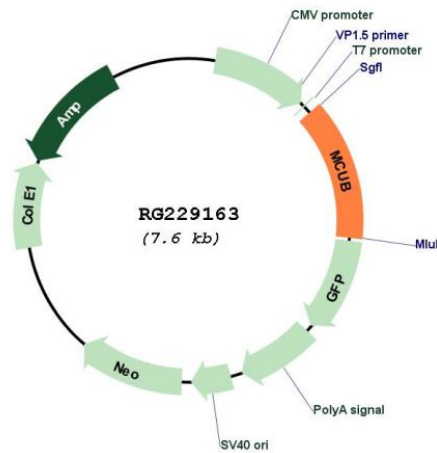
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_017918

**ORF Size:** 1008 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_017918.5</a>
<b>RefSeq Size:</b>	1298 bp
<b>RefSeq ORF:</b>	1011 bp
<b>Locus ID:</b>	55013
<b>UniProt ID:</b>	<a href="#">Q9NWR8</a>
<b>Cytogenetics:</b>	4q25
<b>Domains:</b>	DUF607
<b>Protein Families:</b>	Transmembrane
<b>Gene Summary:</b>	Negatively regulates the activity of MCU, the mitochondrial inner membrane calcium uniporter, and thereby modulates calcium uptake into the mitochondrion. Does not form functional calcium channels by itself. Mitochondrial calcium homeostasis plays key roles in cellular physiology and regulates cell bioenergetics, cytoplasmic calcium signals and activation of cell death pathways.[UniProtKB/Swiss-Prot Function]